Northeast Nigeria Response
BORNO State Health Sector Bulletin # 11
11 December 2016

HIGHLIGHTS

- In the three most directly affected states of Adamawa, Borno, and Yobe, 6.9 million people are in need of health assistance, with 1.7 million IDPs, including nearly 1 million children. In an area already economically deprived with extreme poverty and underdevelopment, more than 78 per cent of IDPs are living among host communities (IOM, Oct 2016).

- Borno State Ministry of Health and partners are continuing with reactive measles vaccination among children aged 6 month - 15 years in 18 IDPs camps in MMC, Jere and Gwoza. Vaccination has been completed in 15 camps while ongoing in other three camps (Dalori, Kofa and NYSC). A total of 69,162 children have so far been vaccinated with a coverage rate of 93.6%

- As end of November 2016, so far, 3.55 million people have been reached with primary health care services through UNICEF-supported, Government-run health centres and clinics in IDP camps and affected communities.

HEALTH SECTOR

- 18 HEALTH SECTOR PARTNERS
- 298 FUNCTIONING** (OF ASSESSED HEALTH FACILITIES)
- 334 DAMAGED/BURNT/CLOSED
- 877,673 MEDICAL CONSULTATIONS***
- 160 EWARS SENTINEL SITES
- 92 REPORTING SENTINEL SITES
- 30 TOTAL ALERTS RAISED****

VACCINATION

- 1,849,995* POLIO
  - IPV & OPV*****

SECTOR FUNDING

- 7 MILLION USD FUNDED (13%)
- 53.1 MILLION USD REQUESTED

* Total number of vaccinated children,
** A report of the NE assessment conducted by the Special Duties Unit of the Federal Ministry of Health and the National Health Sector Working Group May 2016
*** Cumulative number of medical consultations at the IDP camps from Epidemiological Weeks 1 - 48
**** The number of alerts change from week to week
***** Number of Polio vaccinated children in the Outbreak and Response campaign (IPV Inactivated Polio Vaccine & OPV Oral Polio Vaccine) as 5 December 2016
Situation Update:

In the three most directly affected states of Adamawa, Borno and Yobe, 6.9 million people are in need of humanitarian health assistance, with 1.7 million IDPs, including nearly 1 million children. In an area already economically deprived with extreme poverty and underdevelopment, more than 78% of IDPs are living among host communities (IOM, October 2016). In particular, the children living in this area are under the threat of illness and death caused by a conundrum of pathologies including General Acute Malnutrition (GAM) combined with malaria and other acute infections such as Acute Respiratory Infections (ARI), diarrhoea and measles. The combination of malnutrition, malaria and measles synergistically increased all cause child mortality up to four times the level of the health emergency threshold of eight deaths among 10,000 children < 5 per day within IDP camps served by MSF\(^1\). It is presumably higher outside the IDP camps where access to health services is not available.

Upon request of WHO Health Emergency Cluster (WHE), the Global Malaria Programme (GMP) has issued a technical recommendation concerning malaria within the humanitarian response, specifically adapted to the particular circumstances of this complex of comorbidities. GMP includes a recommendation for Mass Drug Administration (MDA) of children against malaria with a combination of Artesunate and Amodiaquine (ASAQ). ASAQ has a particularly long chemo-prophylactic effect of about six weeks and has been well tolerated during large scale MDAs carried out in Monrovia and Freetown during the recent Ebola outbreaks\(^1\). It is furthermore already part of the malaria drug policy of the Nigerian Malaria Elimination Programme (NMEP).

Since the beginning of the level 3 emergency the Emergency Warning and Response System (EWARS) has reported malaria as the acute infection with by far the highest weekly incidence of all infectious diseases. Even through the local transmission of malaria is expected to decrease significantly during the dry season with a seasonal low in March; the MDA continues to be urgently required to redress malaria parasite carrier status among children who have survived over two years without malaria prevention. These children risk to get an acute case of clinical malaria – even if not newly infected – if they get measles or any another infection. This may likely push them from the group of GAM into the group of Severe Acute Malnutrition (SAM) with a mortality of 50% outside of hospitals providing therapeutic feeding\(^1\)\(^\text{iii}\)\(^\text{iv}\). Consequently, the MDA continues to be justified in this complex emergency of comorbidities leading together to extreme levels of child mortality as we must assume that most children have already chronically been malaria parasite infected prior to the MDA. In addition to the above, Borno SMOH reported a malaria outbreak among children < 5 years of age as late January and February 2016 (See Graph 1). In conclusion, the GMP, the EPI, malaria and nutrition programmes of Borno State recommended to integrate MDA against malaria into the upcoming national measles campaign in January 2017.

Graph 1. Malaria incidence in Borno State January to October 2016\(^1\)

As the government has reiterated its intention to bring all the State of Borno under military control within the coming weeks, armed conflict and Boko Haram insurgents' attacks, continue to affect the humanitarian response operations and day-to-day activities.

\(^1\) Presented by Borno State MoH during joint response planning meeting of the state’s and EPI, malaria nutrition and diarrhoea control in Abuja on 1/11/2016. (Graph as Epi Week 42)
Public Health Risks and Needs

- Although measles reactive vaccination activities are taken place, the ongoing outbreak has been reported throughout the IDP camps predominantly among the younger un-immunized population and increasing cases continue to be reported in Pulka (Gwoza), and Monguno LGAs. As illustrated in the figure to the right, there is an acute danger of a major measles outbreak as of early as during the first weeks of January 2017.

- Malaria cases still the leading cause of morbidity in IDP camps and host communities in the state. In addition, a malaria outbreak among children < 5 years of age was reported as late January and February 2016 by Borno SMoH, which increases the risk in the coming months.

- Cholera and meningitis because of global warming may not abate for now considering the likely high temperatures witnessed in the country and the circling behaviour of these epidemics seen in Nigeria.

- Limited access of populations to health facilities in liberated areas due to destruction of health facilities and lack of health personnel remains a key challenge.

Surveillance and communicable disease control

- Polio: No new cases of wild poliovirus type 1 (WPV1) were reported in the past week.

- Epidemiological situation in camps: During Epidemiological (Epi) Week 48 malaria, Acute Respiratory Infections (ARI) and watery diarrhoea continue to be the leading causes of morbidity based on 12,394 consultations from 30 IDP camps reporting. The register shows 3,370 case of malaria, 2,840 respiratory infections and 1,290 of watery diarrhoea. The cumulative number of medical consultations for Epi Weeks 1 to 48 reached 877,673; with 3,595 referrals over same period. Twenty-three new measles cases were recorded during Epi Week 48, for a total cumulative number of 2,589 measles cases. The graph trends shows that ARI incidence is increasing, while diarrhoeal diseases and malaria have shown a downward trend in the reporting period from the 30 IDP camps.

- Early Warning Alert and Response System (EWARS): In Epi Week 48, a total of 92 out of 160 reporting sites (including 26 IDP camps) in 13 LGAs submitted their weekly reports. Completeness of reporting was 57% (92 sites) while timeliness was 57% (target 80% respectively). Thirty (30) indicator-based alerts were received of which 7% were verified (target 90%).

- Measles: Between Epi Weeks 36 to 48, a total of 1,462 suspected cases of measles were reported from EWARS reporting sites in 13 LGAs. In Epi Week 48, fifty-six (56) suspected cases were reported with 76.8% of them under 5 years old.
**Malaria:** Malaria is the leading cause of morbidity in Epi week 48 accounting for 50% of all cases reported, followed by Acute Respiratory Infection (ARI) at 13%, Acute watery diarrhoea (AWD) at 7% and Severe Acute Malnutrition (SAM) at 7%.

**Proportional Morbidity in Epi Week 48**

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<tr>
<th>Disease</th>
<th>Proportion</th>
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<tbody>
<tr>
<td>Malaria</td>
<td>50%</td>
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<tr>
<td>Acute Respiratory Infection (ARI)</td>
<td>13%</td>
</tr>
<tr>
<td>Acute watery diarrhoea (AWD)</td>
<td>7%</td>
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<tr>
<td>Severe Acute Malnutrition (SAM)</td>
<td>7%</td>
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**Proportional Mortality in Epi week 48**

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<thead>
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<th>Proportion</th>
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<tbody>
<tr>
<td>Malaria</td>
<td>5%</td>
</tr>
<tr>
<td>Acute Respiratory Infection (ARI)</td>
<td>1%</td>
</tr>
<tr>
<td>Acute watery diarrhoea (AWD)</td>
<td>1%</td>
</tr>
<tr>
<td>Severe Acute Malnutrition (SAM)</td>
<td>1%</td>
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**Acute Watery Diarrhoea (AWD):** In Epi week 48, a total of 1,002 cases of acute watery diarrhoea were reported from 12 LGAs in Borno State. Kondugo LGA accounted for the majority of the cases at 22.7%, while Maiduguri and Jere LGAs accounted for 21.9% and 16.2% respectively. Sixty four percent (64%) of all the cases reported were under 5 years and 36% were aged above 5 years of age. No laboratory confirmed case of cholera was reported.

**Weekly trend of AWD cases reported through EWARS in Borno State since Epi Weeks 34 to 48**

**Severe Acute Malnutrition (SAM):** In Epi Week 48, a total of 958 cases of SAM and one (1) death were reported from 13 LGAs. Biu LGA accounted for the majority of the cases at 20.9%, while Monguno and Kwaya Kusar LGAs accounted for 15.7% and 14% respectively.

**Weekly trend of SAM cases reported through EWARS in Borno State since Epi Weeks 34 to 48**

**Health Sector Coordination**

SMOH led coordination is one of the essential pillars for the health sector and must be effective to help secure the best possible health outcomes from the combination of national resources and external assistance.
requires all stakeholders to join forces together with the SMOH to deliver lifesaving services in line with the NE Nigerian Health Sector emergency plan, in a coordinated way.

- To ensure effectiveness of collaboration and impact of planned activities agreed with state and national MOH, the establishment of a Borno State MOH Public Health Emergency Operations Centre (EOC) dedicated to support state coordination of partners’ multisector operational activities for all areas of intervention with acute health needs was formalised. The objective of this EOC is to optimize the performance of all partners and actors engaged in planned activities by enhancing the SMOH’s ability to coordinate and deliver an efficient response for the on-going health emergency in the NE Nigeria.

As defined in the NE Nigeria Health Sector Response Plan, the SMOH EOC supported by WHO and the partners will contribute to the current strategic objectives:

- Increase access to essential health services
- Strengthen surveillance, early warning systems and prevent & control outbreaks
- Establish effective coordination & operations support.

- The minimum nutrition package (assessment, management, prevention and coordination) has been finalized and presented in the nutrition sector meeting with the key objective to facilitate optimal service provision through health facilities, IDP camps and outreach sites in the communities.

- The Infant and Young Children Feeding in Emergencies (IYCF-E) taskforce has been initiated, and will be working with Health on opportunities to strengthen the delivery through the health system.

### Health Sector Action

**Borno State Ministry of Health (BSMOH) and partners** are continuing with reactive measles vaccination among children aged 6 months to 15 years in the targeted 18 IDPs camps in MMC, Jere, and Gwoza LGAs.

Vaccination has been completed in 15 camps reaching 69,162 children with a coverage rate of 93.6%. Three camps, namely Dalori (FCT), 250 Housing (Kofa) and NYSC recorded a very low coverage and a revisit vaccination have been required and currently is going in these camps. However, some locations still report cases of measles in numbers, especially in Pulkka (Gwoza LGA) and Monguno LGA; that are most recently liberated from the insurgents. An additional 120,000 measles vaccines has been requested to cover the estimated targeted children population in these additional locations.

**Medecins Du Monde (MDM):** provides integrated PHC services in Garba Buzu and Kawarmella IDPs informal settlements and surrounding areas. In November MDM delivered 3,200 consultations (including 1,052 < 5 years) to affected populations in both camps. In the first two weeks of November, their teams recorded 529-suspected cases of Typhoid fever from Garba Buzu and Kawarmella IDP camps. In close coordination with the Health Sector, the **Nigeria Center for Disease Control** collected blood samples for all reported suspected typhoid cases and the Borno State MOH Epidemiologist facilitated laboratory sample collections. Of the seven blood samples taken, six were confirm to be positive.
As part of MDM Routine Immunization activities, 287 children received measles vaccination in both IDP camps, while 346 pregnant women received Tetanus Vaccine during the month. UNFPA supported the NGO with reproductive health kits.

MDM conducted cholera preparedness training for 24 health workers (doctors, community health officers, nurses, midwives and community health extension workers) following reception of an Interagency Diarrheal Disease Kit (IDDK) from WHO. The plan is to continue training the health workers on possible diseases outbreaks respond. As well, as they plans to expand its health coverage to other IDP camps, it is currently conducting camps assessments within MMC and Jere LGA.

International Rescue Committee (IRC) continues to operate 10 mobile clinics in MMC and Jere LGAs. During the reporting period 597 patient consultations of which 37% were children under five. IRC supports five health facilities with medical supplies and additional midwifery staff to strengthen the reproductive health services. In Bakassi camp, it provides a comprehensive package of Reproductive Health (RH) services, and it is constructing a maternity ward, to improve delivery care. In total during this week, skilled birth attendants in the IRC supported clinics conducted 152 deliveries, and 259 women received their family planning method of choice.

The primary health care services are integrated with nutrition OTP and IYCF program. 2,702 children have been admitted in MMC-Jere, 403 children in Monguno and 56 in Kanduga. The stabilization centre in Umeru Shehu Hospital, with 24-bed capacity continues to have 100% or more bed occupancy rate. Mobile clinics have commenced in Kanduga, with 138 consultations during the week. Outreach teams in Mondugo LGA assisted 275 patients, where another comprehensive women centre is being constructed for RH and protection services.

WHO supported the preparatory meetings of integrating Mass Drug Administration (MDA) for malaria with the January 7th 2017 measles campaign to sensitize stakeholders on the possibility of the integration. In line with this, there was a meeting with the State Malaria Program Manager to address the integration of the MDA with the measles campaign however there is no official confirmation from the State Government on this issue.

WHO continued to work with SMOH through the State Malaria Elimination Program (SMEP) and Borno State Environmental Protection Agency BOSEPA on environmental modification to achieve larval source management as it is one of the key activities outlined in the Borno State Response plan to reduce malaria associated morbidity and mortality.

UNICEF: In 2016, so far, 3.55 million people have been reached with primary health care services through UNICEF supported Government run health centres and clinics in IDP camps and affected communities in Adamawa, Borno and Yobe states.

Nutrition

113 health workers were trained in Borno State on Rapid Pro (SMS based monitoring & reporting). The training focused on real time monitoring and reporting of data to improve the quality of the response and to ensure the availability of regular supplies in support of Community Management of Acute Malnutrition (CMAM) programme implementation at the field level.
The sector partners' support has been provided to SPHCD as they led the establishment of 33 outreach for treatment of Severe Acute Malnutrition in MMC and Jere.

As part of WHO building the health system in management of SAM/MC, eight inpatient kits were delivered to four health facilities in four LGAs named Askira, Chibok, Hawul and Briyel. The 19 SAM inpatient kits delivered will treat 950 children for 3 months.

A monitoring visit was made to the University of Maiduguri Teaching Hospital. It was noted that none of the medical doctors have been trained on inpatient care nonetheless, the trained nurse was delivering services well and she was able to train her fellow colleagues on management of SAM/MC at the hospital. She requested that the medical doctors must be trained on inpatient care so that the hospital can effectively manage SAM/MC cases. Anthropometric equipment, drugs and the nutrition supplies (F75, F100, and RUTF) were in place. During the field visit, 17 children were receiving treatment and the recovery rate was reported to be more than 80%.

**MDM** did MUAC screened to 2,651 children 6-59 months attending the mobile clinic in in Garba Buzu and Kawarmela informal camps. Whereby 413 children were admitted in OTP.

### Gaps in response:

- Local Govermental Areas Rapid Response Teams (RRTs) need to be strengthened to improve EWARS completeness of reporting and ensure rapid verification of alerts;
- Control of ongoing polio and measles outbreaks;
- Malaria prevention and control measures to address the current high level of morbidity;
- Provision of primary health care services, essential medicines and medical supplies to care for the affected population especially in the newly liberated areas and to prevent further deterioration of the health system;
- Restoration of health services and non-functional health facilities plus support to overburden health facilities in hosting communities.

### Resource mobilization:

The latest funding overview of the 2016 HRP reports that the health sector is currently 13% funded (FTS/OCHA, 9 December 2016), well below the level required to conduct the scale up required to address unmet health needs amongst internally displaced populations.

### Health Sector Partners

- Federal Ministry of Health and Borno State Ministry of Health
- UN Agencies: IOM, UNFPA, UNICEF, WHO

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1. Epicentre/MSF Retrospective mortality and nutritional surveys (MUAC) among displaced persons in Muna Garage and Custom House Camps Borno State, Nigeria; Presentation made by MSF to FMOH Nigeria in a meeting with partners in Abuja on 27 October 2016.
3. Amy L. Rice,1 Lisa Sacco,2 Adrian Hyder,3 & Robert E. Black4 Malnutrition as an underlying cause of childhood deaths associated with infectious diseases in developing countries Bulletin of the World Health Organization, 2000, 78 (10)