NIGERIA

Health in the Northeast

Overview
For several decades, the northeast has scored lowest in the country on most human development indices. The impact of the Boko Haram insurgency has only compounded the existing problems and worsened the health situation.

Key findings

Anticipated scope and scale
An increase in outbreaks of cholera and other waterborne and communicable diseases is expected during the rainy season starting in June due to poor living conditions and poor availability of WASH facilities.

Decreased availability and accessibility of health services is expected to increase rates of illness and death, especially during the rainy season when many areas will be cut off due to poor roads and flooding.

Priorities

- Capacity building for available health personnel while efforts are made to employ more.
- Early recovery and rehabilitation of damaged facilities and scale-up of programmes to ensure returnees and IDPs have access to essential health services.

Humanitarian constraints

- Damage to critical infrastructure, pre-existing weak national healthcare system, and low number of qualified health workers in the region.
- Rejection of vaccines due to fear and mistrust, and harmful cultural practices among local population.
- Oncoming rainy season and movement restrictions pose difficulties for transport and access.
- Government policies restrict the importation and delivery of humanitarian supplies.
- Insecurity still prevents humanitarian access to many areas and activities are often restricted to local government headquarters.
Crisis impact

High prevalence of communicable and public health diseases has been reported. Malaria, acute watery diarrhoea (AWD), measles, cholera, and respiratory tract infections are of particular concern. In Rann, the headquarters of Kala-Balge LGA, where the population is about 35,000-45,000, an average of six people die daily from diseases and other maladies (IOM 20/03/2017; WHO/UNICEF/WFP/OCHA/IOM 09/01/2017; PI 12/05/2017).

Malaria: From 22 August 2016 to March 2017, a total of 181,753 suspected cases and 108,293 confirmed cases of malaria were reported (Health Sector 31/03/2017).

Measles: Between 22 August and 3 April, 2,890 suspected cases of measles were reported in 13 of the 27 local government areas (LGAs) of Borno state (WHO 30/04/2017).

Acute Water Diarrhoea (AWD): In the third week of March 2017, 1,108 cases of acute watery diarrhoea (AWD) were reported (Health Sector 31/03/2017).

Meningitis: Since the first case of Meningitis was reported in the northwest of the country in November 2016, there have been 13,943 suspected cases and 1,112 deaths (WHO 19/05/2017). 352 cases have been reported in Yobe state with 37 deaths (Health Sector 15/05/2017). There were 25 suspected meningitis cases in Borno as of April (WHO 03/04/2017). While Meningitis was first declared an epidemic in Sokoto state in the northwest, its spread to Yobe state has revealed that the northeast is increasingly more susceptible given the weak health system, response, movement of population displaced by the insurgency and the overcrowded and unhygienic conditions of displacement camps and other settlements (Vanguard 05/04/2017).

The collection of cerebro-spinal fluid samples from suspected cases of meningitis for laboratory analysis to isolate the causative agents is currently about 7%. This low rate need to be addressed to prevent its spread to other northeast states (WHO 28/04/2017).

The absence of adequate WASH facilities and lack of proper shelter not only increases exposure to harsh weather conditions but also heightens the risk of disease outbreaks (UNHCR 11/2016; WHO 31/03/2017). The prevailing rate of severe malnutrition coupled with risky practices like the use of alterative medicines make many children extremely vulnerable to serious complications and death from diseases.

Adequate services are also lacking for those who have sustained injuries during attacks and with other critical health conditions resulting from extreme conditions or trauma (UNHCR 11/2016). Individuals who suffer from chronic illnesses like diabetes, HIV/AIDS, and hypertension are currently unable to receive appropriate treatment and care.

Hepatitis E: There is a high risk of hepatitis E spread from neighbouring Niger (Health Sector 15/05/2017).

Healthcare availability and systems

Boko Haram have targeted and killed medical personnel, and looted and destroyed health facilities. Most health workers who survived have fled. In Borno state, healthcare functions ceased in 12 of the 27 LGAs (UN Security Council 04/05/2017).
At the last count by the Health Resources Availability Monitoring System (HeRAMS), only 34% of the 743 health facilities in Borno state are currently intact. 35% are completely destroyed. 31% of those not destroyed are not functioning, mostly as a result of lack of access due to insecurity. Almost 60% of health facilities have no access to safe water and 32% have no access to any water at all, while 3 out of 4 (73%) facilities do not have enough chlorine stocks to treat water (WHO 14/12/2016). The lack of functional healthcare facilities is impacting on returning refugees and IDPs. In Rann, Kala-Balge LGA, which receives an estimated 1,500–2,000 new arrivals per week, only two clinics service the entire population of around 62,000 people and insecurity makes it too dangerous for people to travel elsewhere in search of healthcare (PI 12/05/2017; MSF 19/04/2017).

Infant and maternal health
Maternal and infant deaths are inadequately reported or unreported. This is especially the case in areas where access is a challenge. In Damboa, no data collection on infant and maternal health or death is being carried out (PI 05/11/2017).

Pregnant women face acute risks. The majority of displaced women and girls lack access to antenatal care. In areas like Damasak, such services are completely unavailable (UNHCR 11/2016; NRC/WFP/IOM/UNICEF/WHO 11/03/2017). Maternal health issues were reported as a major concern during the November 2016 vulnerability screening conducted by UNHCR. Some breastfeeding women report struggling to produce enough milk to sustain their babies and the majority lack access to antenatal care (UNHCR 11/2016).

Indicators of mortality for infants and pregnant women for the northeast were well below the national average before the insurgency. According to the National Demographic and Health Survey (NDHS, 2013), maternal mortality rate was estimated at 1500-2000 per 100,000 live births. Under-five mortality, according to the Multiple Indicator Survey (MICS 2011), was 192 per 1,000 live births.

HIV/AIDS
Of the 18,101 new cases recorded between January and March this year, only 9,438 are currently receiving antiretroviral treatment and counselling as most centres have closed (Premium Times 05/04/2017). Extremely poor living conditions have resulted in the adoption of negative coping strategies like the trading of sex for food and other essentials. Many women and girls have survived sexual violence and the associated cultural stigmatisation prevents health-seeking behaviour (UNHCR 11/2016).

Mental health
The mental health system in Nigeria is very limited, as only eight mental health facilities with 4,000 beds exist in the entire country. In 2012, there were 13 psychiatrists and two psychologists in the northeast, corresponding to 0.069 and 0.01 per 100,000 people respectively – far below the national average (Jidda et al., 2012; WHO 2011). A large proportion of IDP households have pronounced mental health needs stemming from traumatic experiences associated with the insurgency and displacement (UNHCR 11/2016). Many IDPs have sustained severe injuries and they also face a heightened risk of violence, discrimination, social exclusion and other barriers to essential services. All of this impacts on their mental health (WHO 28/02/2012; Racey 2002). People living with chronic illnesses also need mental health support. Misconceptions and lack of awareness about mental health ailments and treatments also hinder access and help seeking behaviour.

Vulnerable groups affected
The vulnerability of women and children remains a serious concern (OCHA 24/02/2017). Children represent 56% of the total IDP population with 9% below the age of one (UNICEF 31/03/2017). There were 5,626 female-headed households across eight LGAs in Borno state, with 27% of the heads breastfeeding and 6% pregnant, who are more vulnerable due to the lack of access to livelihood and services and lack of a public voice. Forced or early marriage is also an issue for girls (UNHCR 11/2016).
Aggravating factors

Overcrowding and population movement

The continued movement of IDPs, some of whom have not been vaccinated against communicable diseases, increases the potential scope of transmission of disease. In the second week of April 2017 alone, 1,199 people arrived in Gwoза Town from Adamawa state. Similar movements were reported in Ngala, Bama, Kala-Balge, Damboa, and Askira Uba LGAs – areas that were previously inaccessible – mostly due to counterinsurgency operations that enabled them to move (IOM 16/04/2017).

Overcrowding in destinations also increases the likelihood of transmission, and the population increases pressure on overstretched resources (MSF 19/04/2017).

Reduced access to basic resources, reduced immunity, and poor hygiene practices all increase the risk of contracting communicable diseases.

WASH

The lack of adequate WASH facilities and the practice of open defecation in crowded camps and communities continue to place IDPs and host communities at risk of outbreaks of waterborne diseases like acute watery diarrhoea (AWD) and cholera. As of February 2017 in Jere LGA, coverage of latrine facilities in five informal settlements was below 20%. Many IDPs in informal settlements live on less than 1L of water per person per day (MSF 27/02/2017). The influx of IDPs in Local Government Areas (LGAs) like Dikwa, Mobbar, Banki, and Bama is overwhelming existing WASH services (OCHA 24/02/2017).

Open defecation, combined with a shortage of water in areas like Rann and Dikwa Town make cholera extremely likely once the rainy season sets in (PI 12/05/2017). In Dikwa, IDPs often wait 10 hours at water points. They therefore resort to collecting spillages, which may be contaminated. They have reported very few functional latrines and no bathrooms (NRC 21/04/2017). MSF’s project coordinator in Rann reports that IDPs in the area survive on less than 5L of water a day and get sick from drinking water from puddles (MSF 19/04/2017).

Food insecurity and malnutrition

Currently, 4.7 million people are food insecure in the northeast, of which an estimated 44,000 are experiencing Famine (IPC Phase 5) conditions. This is projected to rise to 5.2 million in the coming three months (Cadre Harmonise 17/03/2017; OCHA 24/02/2017; FAO 10/03/2017). Malnutrition weakens disease immunity (Bourke 06/2016). In November 2016, the prevalence of GAM was 11.4% in Yobe, 11.3% in Borno, and 5.6% in Adamawa and exceeded 10% (the WHO threshold for “serious”) in five LGAs (Nutrition in Emergency Working Group 01/02/2017). Breastfeeding women report struggling with producing enough milk to sustain their babies (UNHCR 11/2016).
Food security and access in northeast Nigeria

Rainy season
The rainy season coincides with the lean agricultural season and brings a heightened risk of malaria, cholera, and other waterborne diseases (WHO 31/03/2017). The risk of an outbreak of Lassa fever remains present. Vectors appear to get contaminated by the lassa virus when they go into surrounding fields during the rainy season, indicating the virus may survive better in humid conditions. Outbreaks are however more likely caused by increased rodent-man contact such as during the mass movement of people, crowding, and poor sanitation when the rodents move into houses and other human settlements during the dry season (Researchgate 11/05/2017).

In addition, many areas will be cut off as roads will become unusable in the rainy season, limiting access to healthcare (MSF 19/04/2017).

Poverty
The high rate of poverty in Nigeria’s northeast predates the crisis, and health services are not free. With many hospitals insisting on payment before commencing treatment, sometimes even in emergency cases, many patients, particularly IDPs, are unable to access treatment and are sometimes turned away.

Humanitarian Constraints
- Insecurity remains a challenge in many areas as counterinsurgency operations continue. 181,000 people are trapped in Abadama and Marte LGAs of Borno state - the two remaining LGAs that are completely inaccessible (OCHA 06/04/2017). Access to many LGAs like Damboa, Dikwa, Mobbar, and Mafa is limited to headquarters.
- Vandalism of hospital infrastructure, facilities, and equipment has become a problem as a result of lack of security.
- Shortage of skilled workers, especially doctors and midwives, and their reluctance to work in recently accessible and hard-to-reach areas (OCHA 24/02/2017; WHO 31/03/2017).
- The lack of a functional health referral system at LGA levels is an ongoing constraint (OCHA 24/02/2017).
- Logistical challenges - such as poor organisation, the need for military clearance, and poor roads - in moving supplies from warehouses to areas of need result in some LGAs going for several weeks without supplies. This is especially problematic for vaccines which need to be kept cold at all times (ISWG 08/04/2017).
- Corruption in the logistic and supply chain of the government and diversion of medical supplies.
- The rainy season is expected to cut access to many areas.

Information gaps and needs
- Critical gaps exist in regular nutrition screening. A more proactive approach to case finding has been adopted through the use of community mobilisers and health promoters.
- Poor reporting and surveillance means the Early Warning Alert and Response System (EWARS) does not receive reports from all surveillance sites. By the end of February 2017, only 81 out of 160 reporting sites in the 13 LGAs covered had
submitted their weekly reports. As such, there may be some gaps in information about the health situation.

- The National Health Management Information System also has gaps.
- Maternal health reporting needs strengthening, in particular with a database of maternal health and deaths, and general record-keeping at hospitals. The sector is currently considering a unified template for data collection.
- The National Agency for the Control of AIDS (NACA) is planning a baseline survey to update information on the prevalence of HIV/AIDS.
- A process to identify areas at high risk of cholera and other epidemics is ongoing to ensure all outbreaks are reported and responses swift and efficient.

**Lessons learned**

- The northeast, like the rest of Nigeria, is prone to disease outbreaks like meningitis, cholera and malaria: cases are reported every year. Contingency plans should thus be made. Coordinated outbreak response operations and timely data sharing at the LGA and ward levels will better enhance decision making for all public health concerns (NCDC 30/03/2017; OCHA 31/03/2017; WHO 28/04/2017).
- More health education tailored to suit the culture of the people is vital in responding to the outbreaks and the general health situation.
- The government stepping up its role within the working group would ensure the long-term continuity and sustainability of interventions. Gaps are still to be addressed in preparedness, prevention, and control (Health Sector 31/03/2017).
- Understanding cultural and religious beliefs and integrating them will assist health response. Health partners can work with traditional and religious leaders to make patients more receptive.
- Integrating health services to include family planning and primary health care related services, community health, the treatment of sexual and gender-based violence and sexually transmitted infections will be an efficient way to address stigmatised conditions that patients have difficulties talking about.

### National resources and expenditure

<table>
<thead>
<tr>
<th>Service</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians per 10,000 population</td>
<td>4.1</td>
</tr>
<tr>
<td>Nurses and midwives per 10,000 population</td>
<td>16.1</td>
</tr>
<tr>
<td>Mental health care coverage per 100,000 population</td>
<td>2.5</td>
</tr>
<tr>
<td>General government expenditure on health as % of total government expenditure</td>
<td>6.7</td>
</tr>
<tr>
<td>Total healthcare expenditure (2015)</td>
<td>USD 18.3 billion</td>
</tr>
<tr>
<td>Household out-of-pocket expenditure (2009)</td>
<td>90.3%</td>
</tr>
<tr>
<td>Insurance Coverage (2013)</td>
<td>&gt;5%</td>
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<tr>
<td>Tuberculosis vaccine coverage</td>
<td>68%</td>
</tr>
<tr>
<td>Polio vaccine coverage</td>
<td>55%</td>
</tr>
<tr>
<td>Meningitis vaccine coverage</td>
<td>54%</td>
</tr>
</tbody>
</table>

Sources: WHO 2011, WHO 2015
## Baseline characteristics

<table>
<thead>
<tr>
<th>Key indicators</th>
<th>Borno</th>
<th>Yobe</th>
<th>Adamawa</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of healthcare facilities per 10,000 people (2011)</td>
<td>19</td>
<td>10</td>
<td>28</td>
</tr>
<tr>
<td>People below self-rated poverty line (2010)</td>
<td>87.81%</td>
<td>87.36%</td>
<td>76.18%</td>
</tr>
<tr>
<td>People living with HIV (2007)</td>
<td>59,081</td>
<td>93,933</td>
<td>128,137</td>
</tr>
<tr>
<td>Malnutrition (GAM) in children &lt;5</td>
<td>13%</td>
<td>21%</td>
<td>21%</td>
</tr>
<tr>
<td>Children 12–23 months fully immunized (2011)</td>
<td>2%</td>
<td>4%</td>
<td>19%</td>
</tr>
<tr>
<td>Reported malaria cases (2007)</td>
<td>57,734</td>
<td>34,428</td>
<td>105,966</td>
</tr>
<tr>
<td>Births assisted by skilled health personnel</td>
<td>13%</td>
<td>9%</td>
<td>15%</td>
</tr>
<tr>
<td>Births delivered in a health facility (2011)</td>
<td>12%</td>
<td>6%</td>
<td>11%</td>
</tr>
<tr>
<td>Infant mortality (2013)</td>
<td>59.9 per 1,000 live births</td>
<td>129.6 per 1,000 live births</td>
<td>36.4 per 1,000 live births</td>
</tr>
<tr>
<td>Under 5 mortality (2013)</td>
<td>91.8 per 1,000 live births</td>
<td>218.2 per 1,000 live births</td>
<td>50.5 per 1,000 live births</td>
</tr>
</tbody>
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AWD and SAM cases in Borno

Number of AWD and SAM cases per LGA in Borno state, as of 26 March

LEGEND