Overview

The Sahel suffers from chronic malnutrition. According to UN sources, over 490 000 children die each year of malnutrition-related causes in this region. With the poor harvest and increasing food insecurity, there are serious concerns of a full-scale disaster this year. There are an estimated 20 million people living in vulnerable areas and 15.6 million of these people are affected by food insecurity (OCHA, March 2012).

The governments of the six most affected countries (Burkina Faso, Chad, Gambia, Niger, Mali and Mauritania) have declared a state of emergency in each of their countries and are calling for international assistance. While the governments of Cameroon, Nigeria and Senegal have not yet called for international support, regions within these countries are also experiencing increasing numbers of malnutrition cases.

The food insecurity and nutritional situation, caused by a lack of rainfall, is compounded by the impact of conflicts in Libya, Côte d’Ivoire and Nigeria. There are about 200 000 returnees in addition to the 413 000 refugees, already in the region (363 300 in Senegal, Mali, Niger and Chad, UNHCR 2012). The conflict and recent coup in Mali have resulted in the displacement of over 222 000 people, including 127 000 IDPs. There have been 93 000 refugees in Mauritania, Burkina Faso, Niger, and Algeria and 2000 returnees (as of 5 April). Health services in Northern Mali have been disrupted by conflict in Kidal, Gao and Tombouctou.

The food security and nutrition crisis is also a public health crisis. Malnutrition makes people, particularly children under five, weaker and more prone to disease. Up to 20% of the expected one million children who are severely malnourished (UNICEF) are likely to develop serious medical complications such as diarrhoea and pneumonia. Failing to take care of these children in time will lead to death rates well above 5%.

This crisis is evolving in one of the poorest regions of the world, which already has a very high baseline prevalence of acute malnutrition (9 – 15%), a high burden of malaria, diarrhoea and pneumonia and several on-going epidemics (e.g. meningitis in nine countries; and measles in Niger, Chad and Cameroon). Malnutrition intensifies the severity of these epidemics and disease, in turn, causes a deterioration in nutritional status.

This crisis is further exacerbated because it is occurring in countries with very fragile health systems and services. In large areas of all these countries, health facilities are poor and health workers scarce.

Health interventions should urgently be scaled up, mainly in areas not yet covered, to complement on-going nutrition and food interventions.
Health situation and health risks

Acute respiratory infections are the main cause for consultation (>20%) for children under five, followed closely by diarrhoea and malaria. The risk of contracting these diseases and dying from them is greatly increased by malnutrition.

There are on-going disease outbreaks, including cholera, measles, meningitis, Lassa fever and threats of poliomyelitis, in all of the nine affected countries.

Details of the situation in each country are provided in the attached annex.

Objectives

1. **Severe Acute Malnutrition with medical complications**: Provide technical assistance, medical supplies and equipment for enhanced management of medical complications of Severe Acute Malnutrition (SAM).

2. **Prevention and control of communicable diseases**: Strengthen early warning and response systems (EWARN) for epidemic-prone diseases and support targeted mass interventions such as measles vaccination, distribution of insecticidal bed nets (LLINs), vitamin A and deworming tablets, and vector control activities.

3. **Coordination**: Coordinate health response activities at regional, national and sub-national levels, based on reliable morbidity, mortality and health systems information to support priority setting and response planning. Initiate public health risk and vulnerability mapping for health system and community resilience building. Develop contingency plans and health preparedness interventions to address the current and future crises.

4. **Basic and referral health services**: Provide expert technical assistance as well as medicines, medical supplies and support staff redeployment in order to support basic and referral health care services for the affected population, especially for the management of high burden conditions such as pneumonia, diarrhoea and malaria.

Activities

**Severe Acute Malnutrition with medical complications**
- Train health staff in the management of medical complications of acute malnutrition within the Integrated Management of Child Illness (IMCI) programmes
- Provide medical supplies to manage malnutrition and its medical complications.
- Support free access to health care, especially for children under five and pregnant women

**Prevention and control of communicable diseases**
- Support mass vaccination and other integrated preventive interventions in refugee and host populations.
- Strengthen disease surveillance and EWARN and respond promptly to outbreaks.
- Conduct outbreak preparedness including prepositioning of medical supplies for the control of communicable diseases.

**Coordination**
- Set up sub-regional coordination mechanisms.
- Support in-country Health cluster coordination and inter-cluster coordination (including with UNHCR for refugees).
- Develop and implement country-specific response strategies.
- Conduct on-going needs assessments, provide information on health trends, conduct risk analysis, prioritize health interventions and ensure gaps are filled by partners.
- Monitor the performance of the health sector.
- Support contingency plans and preparedness interventions against identified risks to improve health impacts of the crises.

**Basic and referral health services**
- Support the deployment of health workers to vulnerable areas to increase access to health care.
- Support mobile clinics for remote areas not covered by health facilities.
- Provide medications and supplies for basic and referral services, including for reproductive health.

A more detailed breakdown of activities planned for each of the affected countries is provided in the attached annex.
Expected results

1. Reduced excess morbidity and mortality from high burden conditions, especially in highly vulnerable populations such as children and pregnant women.
   a. Children (refugees and host population), mainly those with acute malnutrition coupled with medical complication diagnosed correctly, and treated rapidly and with appropriate medications.
   b. Mass vaccination and integrated preventive interventions conducted in vulnerable populations.
   c. Pregnant women assisted with prenatal care and obstetric emergency cases referred and treated adequately.

2. Up to date information on the health status of the population and trends available for priority setting and decision-making.
   a. Needs assessments conducted in each country and country strategies developed.
   b. Continuous health services coverage and performance data collected and analysed through strengthened information systems for appropriate decision making.

3. Infectious disease outbreaks prevented, detected and responded to efficiently and effectively.
   a. Weekly data on priority diseases/conditions provided by the surveillance system;
   b. Outbreak preparedness plans developed for the main epidemic-prone diseases including the prepositioning of supplies and staff training.

4. Health response activities in the Sahel region coordinated with health partners and other clusters including a clear and adapted health sector strategy.
   a. Experienced and trained staff deployed in countries to support coordination.
   b. Joint response plans developed to address critical gaps using all available resources.

5. Health systems in food insecure areas strengthened to deal with food insecurity and other public health threats.
   a. Public health risks and community level and health system vulnerability assessed for developing contingency plans and interventions in each of the countries (food insecurity prone areas).

Timeline

The plan covers a 12 month period. It will be updated as needs evolve.

Health cluster partners

Health cluster partners include UN Agencies, Health NGOs and the Red Cross movement in the nine affected countries.

Donors

The only funding received so far has come from the UN Central Emergency Response Fund which has contributed/pledged almost US$4 million.

Additional funding is urgently needed.

Funding required

A total of **US$ 14.2 million** is required by WHO to cover the costs of the response operation over the next twelve months.

<table>
<thead>
<tr>
<th>Country</th>
<th>Funding required</th>
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<tbody>
<tr>
<td>Burkina Faso</td>
<td>954,975</td>
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<tr>
<td>Cameroon</td>
<td>809,975</td>
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<tr>
<td>Chad</td>
<td>2,834,875</td>
</tr>
<tr>
<td>Gambia</td>
<td>766,300</td>
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<tr>
<td>Mali</td>
<td>2,691,250</td>
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<tr>
<td>Mauritania</td>
<td>1,402,650</td>
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<tr>
<td>Niger</td>
<td>1,912,800</td>
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<tr>
<td>Nigeria</td>
<td>1,484,770</td>
</tr>
<tr>
<td>Senegal</td>
<td>826,050</td>
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<tr>
<td>Regional support</td>
<td>558,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>US$ 14,241,645</strong></td>
</tr>
</tbody>
</table>

A more detailed budget, itemized by country and objective is included in the attached annex.

For more information:

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Dr. Stella Anyangwe, DRP Programme Area Coordinator
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WHO Headquarters
Ms. Elizabeth Hoff, PEC/ERM
hoffe@who.int
http://www.who.int/disasters
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Burkina Faso</th>
<th>Cameroon</th>
<th>Chad</th>
<th>Gambia</th>
<th>Mali</th>
<th>Mauritania</th>
<th>Niger</th>
<th>Nigeria</th>
<th>Senegal</th>
<th>Regional Support</th>
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</thead>
<tbody>
<tr>
<td>SAM case management</td>
<td>240,500</td>
<td>103,000</td>
<td>589,000</td>
<td>159,500</td>
<td>436,500</td>
<td>360,000</td>
<td>316,500</td>
<td>308,000</td>
<td>287,000</td>
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<td>Disease control and EWARS</td>
<td>247,475</td>
<td>231,975</td>
<td>598,875</td>
<td>135,800</td>
<td>460,450</td>
<td>244,250</td>
<td>434,150</td>
<td>240,770</td>
<td>188,350</td>
<td>110,000</td>
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<tr>
<td>Coordination and support to resilience building</td>
<td>197,000</td>
<td>227,000</td>
<td>592,000</td>
<td>147,000</td>
<td>872,000</td>
<td>352,000</td>
<td>404,000</td>
<td>716,000</td>
<td>151,000</td>
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<td>Basic health services</td>
<td>270,000</td>
<td>248,000</td>
<td>1,055,000</td>
<td>324,000</td>
<td>922,300</td>
<td>446,400</td>
<td>758,150</td>
<td>220,000</td>
<td>199,700</td>
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<tr>
<td>Total US$</td>
<td>954,975</td>
<td>809,975</td>
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</table>

**TOTAL US$ for the 9 countries + Regional support**

US$ 14,241,645

The budget is for WHO activities in support to MoH (urgent need in public health facilities left unattended) and health partners as Health cluster lead.
### Annex 1 - Matrix of activities by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Affected areas and population</th>
<th>Public health risks</th>
<th>On-going response</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Burkina Faso</strong></td>
<td>• Total population affected: 2.85 million</td>
<td>• Ongoing meningitis outbreak: 15 districts are in alert mode and six in epidemic mode: Kombissiri, Sindou, Banfora, Dafra, Dande, Solenza: (week 1-12): 3000 cases, 304 deaths</td>
<td>Through CERF for refugees • Procuring medical kits and other medical supplies • Support deployment of additional staff in health centres</td>
<td>Scaling up ongoing interventions for local populations suffering from food insecurity:</td>
</tr>
<tr>
<td></td>
<td>• Food insecure areas include approximately 16 provinces, mainly Yagh, Sêno, Oudalan and Soum</td>
<td>• Measles: 840 cases and five deaths (CFR: 0.6%)</td>
<td>• Briefing health workers on management of common diseases, including acute malnutrition with medical complications and psychological stress, based on national guidelines and protocols</td>
<td>Disease burden • Procure drugs (kits) and other medical supplies for health care facilities • Support deployment of additional staff in health centres</td>
</tr>
<tr>
<td></td>
<td>• Refugees: mainly Oudalan (Idanabo, Gendafabou and Soum (Djibo) provinces.</td>
<td>• Major causes of morbidity in children under five include: malaria (28%), Acute Respiratory Infection (ARI) (18%), diarrhoea (16%) and measles</td>
<td>• Strengthening disease surveillance in health districts hosting refugees</td>
<td>Severe acute malnutrition • Brief health workers on management of common diseases, including acute malnutrition with medical complications and psychological stress, based on national guidelines and protocols</td>
</tr>
<tr>
<td></td>
<td>• Global Acute Malnutrition (GAM): 13.4% in Mounhoun region</td>
<td>• Nine hospital beds, 0.6 medical doctors and 21 nurses per 10,000 population, (National average, 2006: WHO World Health report 2011)</td>
<td>• Supporting immunization campaigns against measles and meningitis</td>
<td>Prevent and control disease outbreaks • Strengthen disease and nutrition surveillance and EWARN systems in health districts hosting refugees • Preposition medical supplies for the control of communicable diseases • Support immunization campaigns against measles and meningitis • Support community sensitization for disease prevention</td>
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<td></td>
<td></td>
<td></td>
<td>• Support community sensitization for disease prevention</td>
<td>Mitigating health impact of the crisis • Health risk assessment and contingency planning • Strengthen health coordination mechanisms with MoH (resources for field visits and eventual presence)</td>
</tr>
<tr>
<td>Country</td>
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<td>On-going response</td>
<td>Activities</td>
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| Cameroon | • Total population in affected regions (North and Far North): 5,891,785 people (1,184,249 children under five years old and 324,048 pregnant women).  
  • GAM: 12.4% (9.8 to 15.1) in the region of the Far North; 9.6% (6.8 to 12.5) in the North.  
  • Prevalence of malnutrition among women, 15.2% (12.1 to 18.4) in the North; 21.4% (17.4 to 27.5) in the Far North.  
  • Measles epidemics affecting 21 of the 43 health districts (43.8% in affected regions) Most of the reported cases were in age group above five years  
  • There have been 3,766 cases of measles, with 11 deaths (CFR: 0.3%) as of week 11 in food insecure areas (64% of cases). In the entire country there have been 5,837 cases and 20 deaths.  
  • Risk of cholera due to poor access to water; Lassa fever (ongoing in Nigeria) and polio  
  • Low routine immunization coverage (<70%); deworming (39.1%); and use of ITNs (8.7% in children and 5.7% among women).  
  • Major causes of child morbidity: malaria (19%), ARI(18%), diarrhoea(16%), measles; increasing number of ARI cases related to the dry season  
  • Fifteen hospital beds, 1.9 medical doctors and 16 nurses per 10,000 population (National average, 2006)  
  • Detection rate of SAM cases is only 47% due to lack of financial resources (medicine, laboratory, Rx exams) | • Nutritional status evaluation in the two regions by the Ministry of Public Health  
  • WFP started food distribution in the most affected area (Far North region)  
  • Surveillance system assessed to address gaps  
  • Planning for mass immunization campaign against polio coupled with measles (11-16 April), with partners: UNICEF, MSF, Lions club, Red Cross and Plan Cameroun  
  • Setting up Toll-Free Numbers in affected districts (2 regions) to improve data collection for EWARN and surveillance system.  
  • A network of 835 community workers for malnutrition case detection and referral to nutrition and health facilities  
  • Review of nutrition data collection tools  
  • Nutrition survey planned by MSF during the immunization campaign | Disease burden  
  • Support for the prevention and management of measles cases and infectious diseases associated or linked to malnutrition (guidelines and medical supplies).  
  Prevent and control disease outbreaks  
  • Support immunization campaign for measles: extend to 1,573,107 children between 6-15 years (with contribution from NGO partners)  
  • Strengthen disease and nutrition surveillance and EWARN systemsPreposition medical supplies for the control of communicable diseases.  
  Severe Acute Manutrition  
  • Strengthen integrated management of SAM cases with medical complications with medical supplies provision staff training and deployment)  
  Coordinated health interventions  
  • Strengthen health coordination mechanisms with MoH (resources for field visits and eventual presence)  
  • Preposition medical supplies for the control of communicable diseases |
<table>
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<tr>
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<tbody>
<tr>
<td>Chad</td>
<td>Total Population in affected regions: 6,035,253 people&lt;br&gt;• &lt; 5 years: 1,098,416&lt;br&gt;• Pregnant Women: 196,150&lt;br&gt;• Most affected regions: Kanem, Barh El Gazel, Batna, Wadi Fira, Hadjer Lamis, and Salamat&lt;br&gt;• IDPs: 69,000 not resettled&lt;br&gt;• Refugees: 274,640 Sudanese; 67,863 Central African Republic&lt;br&gt;• Returnees: 800 from Nigeria&lt;br&gt;• GAM above 15% (in seven affected regions)&lt;br&gt;• SAM: Batna, 4.6%; Wadi Fira, 4.6%; Sila, 5%;&lt;br&gt;• Expected cases of SAM: 127,300&lt;br&gt;• Expected SAM with medical complications: 25,460</td>
<td>Recurrent outbreaks: meningitis, measles and cholera&lt;br&gt;• Ongoing meningitis (NmA) outbreaks: seven districts in epidemic mode and three in alert mode: 2136 cases and 102 deaths: week 1-13 (CFR: 4.8%)&lt;br&gt;• Measles cases: 5039 cases and 36 deaths (CFR: 0.7%), week 1-13&lt;br&gt;• GAM cases registered in health facilities: 25,256: week 1-12: number increasing form 1500 at week 5 to 3000 at week 12&lt;br&gt;• Major causes of child morbidity: malaria (24%), diarrhoea (20%), ARI (18%)&lt;br&gt;• Four hospital beds, 0.4 medical doctors and 2.8 nurses per 10,000 population (National average, 2005).</td>
<td>Health situation monitoring (Ministry of Health with partners support)&lt;br&gt;• Support to MoH for the meningitis and measles outbreaks: medical and laboratory supplies prepositioned in 15 Districts; immunization in Bedjondo and Goundi Districts&lt;br&gt;• Mass immunization campaign against measles and polio (target: children six to 59 months), in January 2012&lt;br&gt;• Strengthened integrated disease and nutrition surveillance in affected districts&lt;br&gt;• Provision of medicines and other medical supplies to health facilities to districts at high risk for cholera&lt;br&gt;• Two mobile clinics for remote areas not covered by health centers (Kanem and Bahr El Ghazal regions)&lt;br&gt;• Support to nutrition surveillance in 10 regions of the Sahel Belt</td>
<td>Disease burden&lt;br&gt;• Support the deployment of mobile teams&lt;br&gt;• Support the deployment of health workers to increase access to health care&lt;br&gt;Prevent and control disease outbreaks&lt;br&gt;• Strengthen disease and nutrition surveillance and EWARN systems (10 regions of Sahel belt)&lt;br&gt;• Respond to the meningitis and measles outbreak (1,170,000 vaccine MenA mobilized by WHO and health partners.)&lt;br&gt;• Preposition medical supplies for the control of communicable diseases&lt;br&gt;Severe Acute Malnutrition&lt;br&gt;• Provision of medical supplies to manage malnutrition and related illnesses in 22 health facilities&lt;br&gt;• Training health staff in the management of medical complications of acute malnutrition and IMCI (five regions)&lt;br&gt;• Recruitment of one Medical Nutrition Expert to support MoH&lt;br&gt;Coordinated health interventions&lt;br&gt;• Strengthen health coordination mechanisms with MoH (resources for field visit and eventual field presence)</td>
</tr>
<tr>
<td>Country</td>
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| Gambia  | • Vulnerable Population: 605 000 children under five: 102 800  
    • Most affected: 428 000  
    • Vulnerable districts: 25  
    • 19 most affected districts in the affected regions | • Major causes of child morbidity: Malaria (22%), ARI (16%), Diarrhea (14%),  
    • 11 Hospital beds, 0.4 medical doctors and 5.7 nurses per 10 000 population (national, 2009)  
    • Meningitis outbreaks in Fulladu West District (past epidemic threshold): 76 cases/nine deaths (CFR: 11.84%) as of week 11 | • Response plan developed and CERF allocated  
    • Support to disease surveillance  
    • Support to integrated management | Disease burden  
    • Support the deployment of health workers to increase access to health care  
    • Provision of essential medicine (kits)  
Prevent and control disease outbreaks  
    • Strengthening disease surveillance and EWARN (19 most affected districts)  
    • Support response to the meningitis outbreak.  
    • Preposition medical supplies for outbreak response  
Severe Acute Malnutrition  
    • Provision of medical supplies to manage malnutrition and related illnesses  
    • Training health staff in the management of medical complications of acute malnutrition and IMCI  
Coordinated health interventions  
    • Strengthen health coordination mechanisms with MoH (resources for field visits and eventual field presence) |
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</thead>
</table>
| Mali        | • Most affected regions are Kidal, Gao, Tombouctou, Mopti and Ségou (5,693,261 people).  
              • IDPs: Kidal, Tombouctou, Gao; 93,000 people  
              • Situation deteriorating in regions affected by food insecurity and population movement: Tombouctou and Gao  
              • 35 health districts affected by food insecurity  
              • Food insecurity: Kayes (Under 5 GAM: 13%; SAM: 2.9%); Koulikoro (GAM: 13.2%; SAM: 2.8%); Tombouctou (GAM: 16%; SAM: 3.4%); Gao (GAM: 15.2%; SAM: 2.9%) (MoH, 2011) | • Recurrent outbreaks: meningitis, measles, cholera,  
              • Risk of yellow fever (case in 2010)  
              • 2011: Anthrax in Tombouctou, 25 cases/6 deaths; cholera in five regions, 1,303 cases/55 deaths.  
              • 2012: Meningitis cases (Nm W135): week 1-12: 258 cases four deaths (CFR: 1.55%); measles: 132 cumulative cases and 0 deaths  
              • Measles vaccination coverage: 63%; DTP3: 76% (national)  
              • Major causes of child morbidity in general: diarrhoea (22%), ARI (21%), malaria (16%)  
              • MOH survey in 2010 showed malaria prevalence in children between 6-59 months of age was 37.5%. In rural areas, the prevalence was even higher with 44.8%.  
              • There are six hospital beds, 0.5 medical doctors and three nurses per 10,000 population (National average, 2008) | • Health cluster activated and Health Cluster Coordinator deployed  
              • Support to health care for IDPs (NGOs)  
              • Rapid assessment planned in Tombouctou  
              • Medical supplies provision in process (WHO)  
              • Strengthening disease surveillance | Disease burden  
• Support the deployment of health workers to increase access to health care (in IDP areas)  
• Provision of essential medicine (kits)  
Prevent and control disease outbreaks  
• Strengthening disease surveillance and EWARN  
• Support response to the meningitis outbreak.  
• Preposition medical supplies for outbreak response  
Severe Acute Malnutrition  
• Provision of medical supplies to manage malnutrition and related illnesses  
• Training health staff in the management of medical complications of acute malnutrition and IMCI  
Coordinated health interventions  
• Strengthen health coordination mechanisms with MoH (resources for field visits and eventual field presence) |
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<tr>
<td>Mauritania</td>
<td>• 700 000 people in food insecure areas with 520 000 in need of assistance&lt;br&gt; • 39 489 refugees: Hodh El Chargu region (Fassala, Mbérra, Kobeni and Tenaha)&lt;br&gt; • GAM &gt;15% in four regions Assaba (15.3%), Gorgol (15.7%), Brakna (18%), Guidimakha (15%). In the December SMART survey prevalence showed lower prevalence except in Bakna (12.5%) and Gorgol (11%). However, the worsening food security situation may increase GAM as usual during the lean season.&lt;br&gt; • GAM &gt; 14% in 3 regions and GAM&gt; 10% in the remaining 5 regions (SMART July 2011)</td>
<td>• Access to health services: 67% of the population in affected regions&lt;br&gt; • Measles vaccination coverage: 66% and DTC3: 79% in refugees’ region;&lt;br&gt; • Immunization coverage low in Malian refugees leaving in remote areas of Mali&lt;br&gt; • Recurrent outbreaks: Remaining risk of meningitis, measles, cholera, Rift Valley fever, Congo Crimean fever outbreaks&lt;br&gt; • Communicable diseases: Malaria&lt;br&gt; • ARI (21.4%), malaria (20.9%), diarrhoea (10.4%), anaemia (4.2%) at the refugee health screening center.&lt;br&gt; • Major causes of child morbidity in general: ARI (23%), diarrhoea (19%), malaria (6%)&lt;br&gt; • There are four hospital beds, 1.3 medical doctors and 6.7 nurses per 10 000 population (national, 2006)&lt;br&gt; • One medical doctor for 43 000 people in the referral district hospital in the refugees’ area (field assessment report)&lt;br&gt; • Birth attended by skilled professionals: 34% in refugees’ areas&lt;br&gt; • Critical water and sanitation gaps that could trigger disease outbreaks. Main cause of consultation for refugees is diarrhoea (assessment report)</td>
<td>• Support to initial health assessment in refugees’ area&lt;br&gt; • Technical support to MoH for disease surveillance, immunization activities and health promotion activities in refugees’ area&lt;br&gt; • Support to health staff deployment&lt;br&gt; • Provision of drugs, medical supplies and cold chain equipment to the MoH&lt;br&gt; • Support to coordination (UNCT and health coordination)&lt;br&gt; • Immunization campaign: polio with EPI&lt;br&gt; • NGOs involved in the health response with UNHCR</td>
<td>Disease burden&lt;br&gt; • Improve access to essential health care for refugees (referral level) and local population: medical supplies and equipment (including lab), staff deployment and support to ambulance service in refugees’ areas: Hodh El Chargu (Fassala, Mbérra, Kobeni and Tenaha)&lt;br&gt; Prevent and control disease outbreaks&lt;br&gt; • Strengthen prevention: vaccination coverage (immunization of all refugees) with coming polio campaign); health and hygiene promotion with WASH partners: water quality control and improvement of access to potable water and sanitation facilities.&lt;br&gt; • Strengthen disease and nutrition surveillance: integrating hospital based screening data to disease surveillance Severe Acute Malnutrition&lt;br&gt; • Strengthen SAM case management in therapeutic centres (CRENI, CRENAS) in the Assaba, Gorgol, Brakna and Guidimakha</td>
</tr>
<tr>
<td>Country</td>
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</table>
| Niger   | • Six million people affected by the food crisis.  
  • Tillabéri region the most affected: highest food insecurity and global acute malnutrition prevalence. This region is also hosting Malian refugees and facing a cholera outbreak for the past year  
  • Refugees in three health districts (DS) and in four main sites:  
    • DS Tillabéri (Ayorou: 3940),  
    • DS Ouallam (Sinegodar: 13 005, Mangaize: 2998),  
    • DS Filingue (Abala: 8915),  
  • Influx of returnees and refugees from Côte d'Ivoire, Libya and Mali  
  • Tillabéri with 14.8% GAM, 35.4% of households with food insecurity;  
  • A total of 122 335 SAM cases in children under five with 100 related deaths reported by health facilities from week 1 - 11  
  • Expected cases in 2012:  
    • 614 116 cases of GAM; 393 737 cases of SAM; 65 600 cases of SAM with medical complications  
| • Ongoing cholera outbreaks: 362 cases and six deaths (CFR: 2.2%); initially in Tillabéri region and has spread to Niamey and Dosso regions  
• Increasing measles cases: 125 cases on week 11 and 104 on week 10. There have been 522 measles cases with three deaths as of week 11. There were 2718 cases and six deaths in 2011 in Niger, 28% from Tillabéri  
• Meningitis: 117 cases and 11 deaths versus 566 cases and 60 deaths in 2011  
• Guinea worm prevalent in areas where refugees are coming from (Gao region: 12 of the 30 worldwide cases in 2011)  
• Communicable diseases: malaria  
• Increasing SAM cases in health facilities: 14 324 cases at week 11 versus 566 cases in 2011; 11 525 cases (week 10)  
• Major causes of child morbidity: malaria (21%); AR(20%); diarrhea (19%):  
• Three hospital beds, 0.2 medical doctors and 1.4 Nurse per 10 000 population (national, 2005)  
| • Supporting coordination (Health cluster)  
• Joint needs assessment completed in crisis affected areas  
• Support to cholera outbreak control interventions: epidemic crisis committee coordination, medical and laboratory supplies, health promotion  
• Provision of emergency kits for refugees  
• Strengthening disease surveillance  
• WHO, MoH and NGOs supporting health care in Sinegodar and Mangaize district. UNHCR also supporting refugee health care in Ouallam  
• Disease burden  
  • Support the deployment of mobile teams  
  • Support the deployment of health workers to increase access to health care including reproductive health  
  • Support to mobile clinics  
| Prevent and control disease outbreaks  
  • Strengthen disease surveillance and EWARN and response (mainly in Tillabéri with refugees and ongoing cholera)  
  • Respond to the meningitis and measles outbreaks  
  • Preposition medical supplies for the control of communicable diseases  
  • Support EPI intervention in refugee and host population  
| Severe Acute Malnutrition  
  • Provision of medical supplies to manage malnutrition and related illnesses: support free access to health care  
  • Train health staff in the management of medical complications of acute malnutrition and IMCI coordinated health interventions  
  • Strengthen health coordination mechanisms with MoH (resources for field visits and eventual presence)  

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<tr>
<th>Country</th>
<th>Affected areas and population</th>
<th>Public health risks</th>
<th>On-going response</th>
<th>Activities</th>
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<tr>
<td>Nigeria</td>
<td>• Seven states in northern Nigeria affected: Sokoto, Katsina, Jigawa, Yobe, Zamfara, Kebbi and Kano. (Combined population: 38 576 735; of which 7 715 347 are under-five) • GAM &gt; 10% in four states (Katsina, Sokoto, Jigawa and Yobe)</td>
<td>• Recurrent outbreaks of infectious diseases such as measles, cholera and meningitis in the affected states • Lassa Fever: 525 cumulative cases and 54 deaths (CFR: 10.29) (weeks 1-10) • Major causes of child morbidity: malaria (26%); diarrhoea (15%), ARI (15%). • There are five hospital beds, four medical doctors and 16.1 nurses per 10 000 population (national, 2004)</td>
<td>• Scaling up of Vitamin A supplementation, integrated with polio and measles immunization programmes • Improving deworming coverage • Improving coverage of feeding programmes for under-fives • Promoting improved infant and young child feeding practices • Facility-based treatment of severe acute malnutrition • Heightening nutritional and disease surveillance</td>
<td>Disease burden • Increase coverage of Vitamin A supplementation and deworming in most of the affected states. Prevent and control disease outbreaks • Strengthen disease surveillance and EWARN and response Severe Acute Malnutrition • Strengthen the capacity of primary healthcare workers and community volunteers on infant and young child feeding in emergencies. • Supply of therapeutic food, medications and nutrition equipment. • Strengthen nutrition programme in affected districts with joint nutrition and health interventions at community and facility level to address chronic malnutrition in children and young mothers Coordinated health interventions • Strengthen health coordination mechanisms with MoH (resources for field visit and eventual presence)</td>
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<td>Senegal</td>
<td>• Drought affected regions: Ziguinchor, Kolda, Sédhiou, Kédougou, Tambacounda, but mainly Matam and Diourbel</td>
<td>• Main cause of morbidity for children under five: ARI (due to the dry season), malaria and malnutrition in affected areas</td>
<td>• Development of a joint government and partners response plan</td>
<td>Severe Acute Malnutrition • Provide emergency kits for health facility-based management of SAM.</td>
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<td>• Affected population: 850 000 Population targeted by UNCT: 237 000</td>
<td>• Malaria (19%), ARI (17%), diarrhoea (14%)</td>
<td>• SAM case management capacity assessment in existing operational structures in the most affected regions: Matam and Diourbel.</td>
<td>• Support capacity building (training and formative supervisions) of health workers in health centers and hospitals (IMCI including integrated management of child illnesses with SAM and counseling in child feeding)</td>
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<td>• Women and girls 120 000</td>
<td>• Cholera cases confirmed in 2011 in Bakel District in Tambacounda region (10 cases/0 death)</td>
<td>• Increasing formative supervision (CERF, WHO and UNICEF) to improve case management in the two regions Matam and Diourbel.</td>
<td>Prevent and control disease outbreaks • Provide technical support for nutrition and disease surveillance systems in health facilities and at community level</td>
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<td>• Men and boys 117 000</td>
<td>• Measles coverage &lt;70 for children nine - 59 months in 2011, 394 suspected measles cases in 2011 in seven regions (SMART survey).</td>
<td>• Training of health workers not yet trained, provision of anthropometric equipment and other supplies to SAM case management to increase coverage of structures dealing with SAM</td>
<td>• Strengthen immunization activities mainly targeting measles.</td>
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<td>• Children under five years old: 44 650</td>
<td>• There are three hospital beds, 0.6 medical doctors and 4.2 nurses per 10 000 population (national, 2008)</td>
<td>• Strengthen preventive activities for malnutrition (communication, Vit A supplementary campaigns and deworming)</td>
<td>Coordinated health interventions • Strengthen health coordination mechanisms with MoH (resources for field visit and eventual presence)</td>
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<td>• GAM prevalence above 15% in Saint-Louis, Matam et Louga regions, and above 10% for Tambacounda and Thiès regions (EDS5/MICS 2010-2011).</td>
<td>• Stunting &lt; 40%; but chronic under nutrition in Kédougou and Kolda with prevalence &gt; 25%.</td>
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<td>• Diourbel is the most affected region with SAM above 10% with worsening factors: SAM at 2% (SMART 2011).</td>
<td>• Underweight &lt; 30% but Matam and Kolda need to be monitored</td>
<td>• There are three hospital beds, 0.6 medical doctors and 4.2 nurses per 10 000 population (national, 2008)</td>
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