Malnutrition in Northeast Syria: the case for urgent action
The World Health Organization and the Nutrition Sector continue to expand detection, as well as preventive and specialized in-patient nutrition services for children with acute malnutrition and ensure the availability of critical supplies.

Malnutrition refers to deficiencies, excesses or imbalances in a person’s intake of energy and/or nutrients. The term malnutrition covers two broad groups of conditions. One is ‘under-nutrition’, which includes stunting (low height for age), wasting (low weight for height), underweight (low weight for age) and micronutrient deficiencies or insufficiencies (a lack of important vitamins and minerals).

Malnutrition affects people in every country. Worldwide, some 159 million are stunted and 50 million are wasted.

Many families cannot afford or do not have access to nutritious foods like fresh fruits, vegetables, legumes, meat, and milk.

Over the past eleven years, northeast Syria (NES) has suffered enormously due to the ongoing crisis. The deterioration of health services, the economic crisis, and the decrease in purchasing power, coupled with the difficulty of accessing safe drinking water have all led to an increase in malnutrition rates.

As evidence shows, in 2022-2023 about 5.5 million people including mothers and children aged 0-59 months in Syria will need direct nutrition assistance; half of them live in Northeast Syria. Subsequent surveys have shown that the incidence of acute and chronic malnutrition is twice as much in Northeast Syria as compared to the rest of the country. The northeast region includes Deir-Ez-Zor, Ar-Raqqa and Al-Hassakeh governorates.

The World Health Organization continues to confront the deteriorating nutritional situation in NES by providing a package of different nutritional service programmes. The main aim is to detect cases of malnutrition and ensure they get the appropriate management needed. WHO supports the management of malnutrition associated with complications in stabilization centres, in addition to fulfilling the need to prevent malnutrition through multiple programmes, such as Infant and Young Child Feeding (IYCF) Counselling, as well as the Baby-Friendly Hospitals Initiative (BFHI).

Addressing malnutrition is one of the key priorities for WHO in NES. The latest survey that was conducted in 2019 indicates that the rates of acute and chronic malnutrition cases in NES exceeded those recorded in other regions across the country.

WHO expanded nutrition services in Northeast Syria in 2021 to reach a large number of health facilities operating in the three governorates. Despite the challenges and the shortage of healthcare providers, WHO has covered large parts of NES including hard-to-reach areas.
WHO plays a leading role in detecting malnutrition cases in health facilities and securing the transfer to outpatient clinics for the non-complicated cases, as well as to stabilization centres for managing the more complicated cases. The stabilization centres save hundreds of lives among the most critical malnutrition cases every year.

Across Syria, in 2021, WHO examined children at 968 health centres as part of the nutrition surveillance programme. Among the 1,016,059 screened children under the age of five, 21,865 (2.15%) were found to be suffering from acute malnutrition; 1,477 were referred to stabilization centres (0.77%) due to health complications that made them more susceptible to illnesses and placed them at a greater risk of dying from infection and micronutrient deficiency.

WHO is sparing no effort to support under-nourished children. In 2021, WHO took the lead in supporting 19 stabilization centres in the country, four of which are in Northeast Syria, where nutrition surveillance continues to expand.

In NES, 655 out of 84,161 (0.8%) children screened were referred to stabilization centres.
Due to complex challenges, the rate of acute malnutrition in Syria in the 2019 SMART survey (Standardized Monitoring and Assessment of Relief of Transitions) was 1.7% (1.3% moderate, 0.4% severe), based on weight-for-height z-scores and/or presence of oedema. The rates were much higher in NES, where acute malnutrition levels reached 2.8% in Al-Hassakeh and 2.7% in Deir-Ez-Zor. Chronic malnutrition as well is higher in NES than other areas in the country (20% Vs 12.7%)

### Comparison of malnutrition rates between NES governorates and Syria in general

<table>
<thead>
<tr>
<th></th>
<th>Deir-ez-Zor</th>
<th>Al-Hassakeh</th>
<th>Syria (Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global Acute Malnutrition</strong></td>
<td>22.0%</td>
<td>19.2%</td>
<td>12.7%</td>
</tr>
<tr>
<td><strong>Chronic Malnutrition</strong></td>
<td>2.7%</td>
<td>2.8%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>
WHO Country Office in Syria devoted particular attention to the nutrition programme in NES and implemented numerous nutritional projects with the Syrian Ministry of Health, the private sector, UN agencies and NGOs, and other health partners in NES. WHO’s work in nutrition programmes is the base of all related work in Northeast Syria, including detecting malnutrition cases in health centres and referring them for treatment.

From January 2021 until the end of February 2022, a total of 109,191 nutrition services were provided in 72 health facilities in Northeast Syria including 66 health centres, 4 stabilization centres and 2 baby-friendly hospitals.

Detection of malnutrition cases using the nutritional surveillance programme
In coordination with the Ministry of Health and other partners on the ground, the nutrition surveillance programme has been implemented in NES for the past four years. WHO is carrying out the nutrition surveillance in 66 health centres and is supporting these centres through training sessions (more than 100 health staff workers were trained in 2021). In addition, it is providing monitoring and logistics support (anthropometric tools, registry, data collection and data analysis).

From January 2021 until the end of February 2022, a total of 84,161 screening services were provided in 66 health centres, which detected 3,012 global acute malnutrition (GAM) cases (3.7%), of which 2,399 were diagnosed as moderate acute malnutrition (MAM) and were referred to outpatient centres supported by UN agencies. Also, 612 were diagnosed with severe acute malnutrition without complication (SAM) and were referred to outpatient centres supported by other UN agencies, while 655 complicated cases were referred and treated in stabilization centres in 4 hospitals.

<table>
<thead>
<tr>
<th>Month</th>
<th>Screened</th>
<th>Detected with GAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>5,258</td>
<td>141</td>
</tr>
<tr>
<td>Feb</td>
<td>3,713</td>
<td>219</td>
</tr>
<tr>
<td>Mar</td>
<td>4,419</td>
<td>231</td>
</tr>
<tr>
<td>Apr</td>
<td>5,140</td>
<td>108</td>
</tr>
<tr>
<td>May</td>
<td></td>
<td>211</td>
</tr>
<tr>
<td>June</td>
<td>6,795</td>
<td>433</td>
</tr>
<tr>
<td>July</td>
<td>6,856</td>
<td>390</td>
</tr>
<tr>
<td>Aug</td>
<td>6,941</td>
<td>292</td>
</tr>
<tr>
<td>Sept</td>
<td>6,340</td>
<td>303</td>
</tr>
<tr>
<td>Oct</td>
<td>6,013</td>
<td>211</td>
</tr>
<tr>
<td>Nov</td>
<td>6,061</td>
<td>199</td>
</tr>
<tr>
<td>Dec</td>
<td>5,955</td>
<td>274</td>
</tr>
</tbody>
</table>

**Nutrition Surveillance Services in 2021 in 66 Health Facilities**

**Number of detected Global Acute Malnutrition (GAM) cases Jan 2021 to End-February 2022**

**GAM detected cases in 2021 in 66 Health Facilities**
Managing cases of severe acute malnutrition with complications in hospital stabilization centres

Severe Acute Malnutrition with Complications (SAMC) presents the most life-threatening challenge. WHO Syria supported 4 Stabilization Centres (SC) in NES receiving hundreds of SAMC cases. SCs in Al Hassakeh, Al-Qamishli, Deir-Ez-Zor and Ar-Raqqa (Al-Tabakah sub-district) are receiving referred cases of SAMC and successfully treating them with a low death rate (2.9%).

From January 2021 till end-February 2022, a total of 655 SAMC cases were managed successfully.

With that strategy, last year WHO trained 100 health staff workers in these stabilization centres in NES along with monitoring the work, collecting data and performing analysis.

WHO provides the equipment and the necessary items for SCs and ensures the referral system for discharging the treated cases to outpatients centres is in place, supported by UN sister agencies.
Training on management of severe acute malnutrition in NES

WHO nutrition supplies, Al Qamishli, NES 2021

Stabilization centers in NES, 2021-2022

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Number of stabilization centres</th>
<th>Cases managed Jan 2021 - Feb 2022</th>
<th>Number of malnourished children saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Hasakah</td>
<td>1</td>
<td>381</td>
<td>373</td>
</tr>
<tr>
<td>Al-Qamishli</td>
<td>1</td>
<td>98</td>
<td>95</td>
</tr>
<tr>
<td>Deir-ez-Zor</td>
<td>1</td>
<td>116</td>
<td>113</td>
</tr>
<tr>
<td>Ar-Raqqa</td>
<td>1</td>
<td>60</td>
<td>58</td>
</tr>
</tbody>
</table>

Treated cases of Severe Acute Malnutrition with Complications - Deir-Ez-Zor – NES 2021
WHO pays special attention to the prevention aspects of malnutrition through the Infant and Young Child Feeding Counselling (IYCF) programme and Baby-Friendly Hospitals Initiative (BFHI).

Integrated infant feeding counselling is designed to equip health workers the competencies required to carry out effective counselling for breastfeeding, infant feeding and complementary feeding. It is designed for health workers in primary healthcare services. In coordination with the Ministry of Health, WHO is supporting IYCF in all 66 supported health centres providing nutrition surveillance services.

Training sessions were offered to 200 health workers in 2021. A total of 18,528 counselling sessions were provided between January 2021 and February 2022.
The SMART survey 2019 in Syria revealed that the prevalence of exclusive breastfeeding during the first 6 months of age is at a low level (28.5%) and far from the regional target (70%) set in the WHO’s Strategy on nutrition for the Eastern Mediterranean Region 2020–2030. The result is alarming as inadequate breastfeeding practices can contribute to nutrition-related developmental challenges in children whereas exclusive breastfeeding can prevent them.

In coordination with the Ministry of Health, WHO supported the BFHI in two hospitals in Deir-Ez-Zor and Al-Qamishli by training 50 staff in 2021. A total of 5,965 services were provided to newborns and mothers from January 2021 until the end of February 2022.

### Baby-Friendly Hospital Initiative (BFHI)

**Cases of Severe Acute Malnutrition with Complications (SAMC) detected in the camps require immediate and urgent management.**

Al-Hol and Al-Areesha camps are two examples that illustrate the WHO approach for the success of the mandate by training health staff working in Al-Hikma Hospital. A total of 99 cases were treated successfully in 2021, as well as 8 cases during January and February 2022. The mortality rate was as low as 2.9%.

### Camps’ response

A poster encouraging breastfeeding

WHO intervention in Al-Hol Camp

Baby-Friendly Hospitals
Looking forward

WHO will continue supporting the nutritional programmes in Northeast Syria by:

- Expanding nutritional surveillance and IYCF from 66 to 95 health centres.
- Providing equipment to stabilization centres as well as therapeutic formula and necessary logistics to save lives of complicated cases of severe acute malnutrition.
- Providing equipment and logistics tools to new health centres.
- Conducting refresher training for 66 health centres and 4 stabilization centres.
- Offering training for 2 BFHI hospitals on how to prevent malnutrition by encouraging breastfeeding.
World Health Organization
Syria Country Office
Abu Rummaneh, Al-Jalaa Str., Bldg. 17
P.O. Box 3946
Damascus, Syrian Arab Republic
http://www.emro.who.int/countries/syria