

# Acute malnutrition threshold

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## Key points

- GAM assessments can be found in nutrition survey reports, notably the Standardised Expanded Nutrition Survey (SENS), and other representative nutrition assessments.
- GAM indicates acute malnutrition based on weight-for-height and/or oedema.
- GAM thresholds must not be used or applied to MUAC assessments.
- Appropriate software must be used to calculate GAM survey results: the standard software ENA for SMART, or the hybrid software Epi Info/ENA. These deliver accurate estimates of prevalence and confidence intervals.

## 1. Overview

Global Acute Malnutrition (GAM) is a measure of acute malnutrition in refugee children aged between 6 and 59 months. GAM provides information on the percentage of all children in this age range in a refugee population who are classified with low weight-for-height and/or oedema. It is obtained by combining the number of children in this age range who have moderate acute malnutrition and severe acute malnutrition. GAM is also often referred to as wasting.

GAM indicates short term (recent) nutritional history in children aged between 6 and 59 months. The measure is important because acute malnutrition increases the risk of illness and death, and children of this age are particularly vulnerable to it. GAM is also considered an indicator of the overall food and nutrition situation of the general population.

GAM is not to be confused with another measurement of acute malnutrition, mid-upper arm circumference (MUAC). MUAC is a rapid screening tool that is commonly used to select individuals for nutrition programmes and nutrition surveillance. Its measurements do not provide a formal threshold of the severity of a situation at population level. MUAC measurements should not be considered as a proxy for GAM either, because acute malnutrition based on MUAC cannot

be directly converted into acute malnutrition based on weight-for-height.

## 2. Main guidance

### Emergency standard

#### Emergency standard

#### Classification of the severity of global acute malnutrition (GAM) in refugee settings

Prevalence thresholds GAM/ Wasting (%)	Label
< 2.5	Very Low
2.5 - < 5	Low
5 - < 10	Medium
10 - < 15	High
> 15	Very High

The UNHCR standard is < 10% global acute malnutrition (GAM) or wasting in a refugee population, meaning that when GAM is less than 10% in a given population the severity of the situation is considered to be of low or medium public health concern. When GAM is 10% or more, the severity of the situation is considered to be of high public health concern and immediate actions must be taken (see table above). This standard applies to both shorter and longer-term situations.

GAM results must clearly explain how children have been selected for inclusion in GAM surveys, how the measurements were taken, and how the data were analysed. The selection procedure should generate a sample that represents the child population as a whole, or otherwise should state clearly the extent to which the poll is representative (for example, representative of one camp, of refugee children in transit centres, etc.). Only children aged between 6 and 59 months may be included. Measurements of weight, height, age and oedema must be taken using internationally recognized methods. Analysis of the results should use specialized software, such as ENA for SMART or Epi Info/ENA.

The term 'global acute malnutrition' must never be used in the context of MUAC assessments (see the overview above).

## **Annexes**

[Guidelines for selective feeding. The management of malnutrition in emergencies](#)

[Moderate Acute Malnutrition. A decision tool for emergencies](#)

[Picture of Measurement of height and weight for children](#)

## **3. Links**

[UNHCR Global Strategy for Public Health UNHCR SENS](#)

## **4. Main contacts**

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