

Introduction to MUAC and Oedema Screening

[🕒 20 min]



Acknowledgements

- Myanmar Nutrition Cluster and AIM-TWG Online Resources
- ACF Myanmar SOP on Mass Screening
- FSNWG guidance on MUAC Screening
- SMART Methodology

What is MUAC and Oedema Screening?

DEFINITION OF SCREENING:

Search to detect un-diagnosed cases of moderate and severe acute malnutrition in the community using MUAC (and edema).

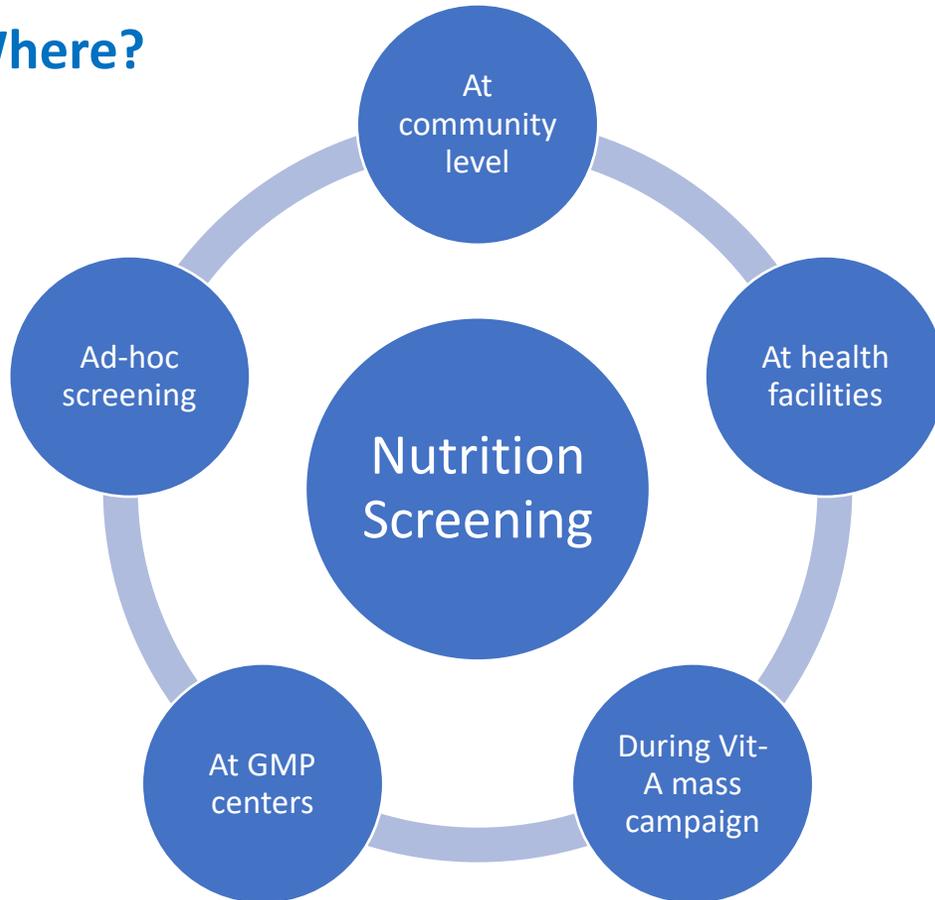
OBJECTIVE OF SCREENING:

To identify undetected cases of acute malnutrition in the community and refer for treatment in order to improve program coverage.



Where, what, when and by whom?

Where?



By Whom?

Usually the nutrition volunteers/ outreach workers, nutrition or health facility staff

What screened?

MUAC and Oedema are the two most common measurements for children while only MUAC for PLWs

When/ Frequency?

Most of the CMAM programme, GMP and HF screening happen monthly basis whereas Vit-A mass campaign or other ad-hoc screening happen quarterly/ bi-annually or annual basis

Limitation of Screening Data

- ❑ **MUAC screening does not follow any particular methodology. It can be carried out:**
 - As part of child health days (e.g. Vit-A, Deworming campaign)
 - As part of routine services at health facility level (e.g. IMCI corner)
 - House-to-house as a community-based mass MUAC screening exercise for identification and referral of malnourished cases to OTP/TSFP centers
 - Mobilizing mothers / caretakers to bring their children to a central location for screening

- ❑ **There is no sampling methodology (to minimize bias) followed**
- ❑ **There is very limited training for MUAC measurement and no standardization testing of measurers**
- ❑ **There is often very limited to no supervision**

Data cannot be used for estimation of prevalence or for calculating caseload **UNLESS:**

- ❑ **Screening data has been disaggregated by age (children above / below 2 years) and sex at collection. This is in order to control for the known age and sex bias of MUAC.**

- ❑ **Some information about the way the screening was carried out is provided:**
 - Some general information on the location and type of population screened (e.g. IDPs / Refugees / residents etc).
 - A brief description of the method used for the screening (house to house **exhaustive** / house to house with a skip pattern / screening at a fixed post, e.g. clinic or OTP / random or EPI sampling).
 - A brief description of the purpose of the screening (e.g. screening on arrival of IDPs or Refugees / as a part of child health days or immunization campaigns / dedicated acute malnutrition case- finding etc).
 - The estimated total population in the area screened is provided.

Some technical points to understand and remember....

- 1) Screening at community vs facility level.
- 2) Usual community/ facility screening with skipping pattern vs the exhaustive screening of all the eligible children in a defined geographical area
- 3) Main objective of usual community screening (part of CMAM nutrition programme) is to detect and refer malnourished cases which also provide monthly/ quarterly trends of nutrition situation while nutrition survey is to identify the exact prevalence of malnutrition at a given point of time.
- 4) Monthly/ quarterly MUAC and Oedema screening can not replace the importance or need of population representative surveys (e.g. DHS, MICS, SMART etc.). Both are important and have different objectives.
- 5) Improving the quality of MUAC & Oedema measurement, skilled outreach staff/ volunteers, balance ratio of child age/ sex and a standardize data collection and reporting system can however increase the reliability and validity of proxy rates/ prevalence calculated from MUAC screening data.

Key Messages

- 1) MUAC and Oedema screening is a valid program intervention to increase coverage of selective feeding programs and should continue as needed.
- 2) MUAC and Oedema screening data can only be used for program targeting, proxy GAM / proxy SAM estimation and/or caseload estimation if the mentioned quality criteria have been met.
- 3) If the results, meeting the criteria mentioned, are alarming then a survey (e.g. SMART,) should be considered.
- 4) If none exist, interventions should always be started to treat the children identified with acute malnutrition through screening. Survey results should not be awaited before treating children in need.
- 5) All children identified with acute malnutrition through screening should be referred for treatment (either for moderate or severe acute malnutrition) and followed up to ensure they are admitted.

Any Question?