



Myanmar Screening Exercise

Final Results September 2022

Introduction

- The **Nutrition Cluster** in Myanmar officially launched August 2021
- Scarcity of recent representative information on the nutrition status in Myanmar. Most recent:
 - 2015-16 Myanmar Demographic and Health Survey (**DHS**)
 - Sept-Oct 2015 **SMART** survey Maungdaw and Bithidaung Townships (Rakhine)
 - 2009-10 Myanmar Multiple Indicator Cluster Survey (**MICS**)
- Assessment are currently not allowed in most areas in Myanmar

Introduction

- This year the **AIM-TWG** requested further support to scale-up the screenings among partners to generate proxy prevalence of acute malnutrition
- MUAC and oedema screening data are needed to produce prevalence to inform nutrition programming
- This exercise has been led by Dr. Ye (ACF) with support from Win Lae, Walton (UNICEF), and Alexa (TST)

Methodology

The following screening methodology was recommended to partners:

- exhaustive, door-to-door screenings of all age-eligible children
- The screening of children 6-59 months by MUAC and oedema
- The screening of children <24 months for IYCF-E
 - exclusive breastfeeding (infants <6 months)
 - use of infant formula (infants <6 months)
 - minimum dietary diversity (children 6-23 months)

MUAC and Oedema Data

The SMART MUAC screening tool was recommended for this exercise.

- Standardized method for reporting screening data
- Low burden of reporting (one sheet for screening information, one sheet for results)
- Results weighted by age
- Can use to report recently completed screening results

SMART
Please review all fields and modify according to your setting

Background

Date(s) of Assessment

Ministry/ NGO/ Agency supporting the assessment

State/ Province

District

Sub-district / Town or Village(s)

Type of the population screened: (1) only local population, (2) both local and displaced population, (3) only displaced population

Brief description of the screening setting: (1) door-to-door outreach community screening for referral, (2) screening of all children combined with the vaccination campaign, (3) hospital (4) fixed health center or health post, (5) mobile health team, (6) food or commodity distribution point, (7) other setting -- describe

If screening at health facility or by mobile health team, indicate whether: (1) only sick children were screened, or (2) healthy children coming for check-up visits or vaccination were screened as well as the sick

Who measured children?: (1) community volunteers, (2) medical staff (nurses, doctors), (3) other -specify

Age ranges included (months)

How did you determine age? Did you use:
1) age (<24 months v. ≥24 months), or
2) height (<87 v. ≥87cm)

Total estimated size of the target population (children 6-59 months) -- for door to door and vaccination campaign screenings only

Total number

		Nutrition Screening Results						Weighted Total** %
		Males		Females		Total		
		N	%	N	%	N	%	
< 2 Years Old	Oedema		#DIV/0!		#DIV/0!	0	#DIV/0!	
	<115 mm		#DIV/0!		#DIV/0!	0	#DIV/0!	
	115-124 mm		#DIV/0!		#DIV/0!	0	#DIV/0!	
	≥125 mm		#DIV/0!		#DIV/0!	0	#DIV/0!	
	Total	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	
≥ 2 Years Old	Oedema		#DIV/0!		#DIV/0!	0	#DIV/0!	
	<115 mm		#DIV/0!		#DIV/0!	0	#DIV/0!	
	115-124 mm		#DIV/0!		#DIV/0!	0	#DIV/0!	
	≥125 mm		#DIV/0!		#DIV/0!	0	#DIV/0!	
	Total	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	
Total	Oedema	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	#DIV/0!
	<115 mm	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	#DIV/0!
	115-124 mm	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	#DIV/0!
	≥125 mm	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	#DIV/0!
	Total	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	#DIV/0!

Instructions: Fill in the cells that have a white background (C5-C8, C10-13, E5-8, E10-13). The rest of the cells will be filled in automatically.

*** MUAC shows a known bias towards younger children. In a balanced sample we expect approximately two thirds (~66%) of the sample to be over 2 years old. If too few older children are included in the sample use the weighted total. Percentage of children over 2 is shown in the last column.

In addition, an electronic questionnaire was developed by UNICEF to reduce the burden of data entry and was made available to partners

IYCF-E Data

In addition, it is recommended by UNICEF that wherever possible, partners collect the following IYCF-E information:

Question	Target	Results
#1: if the infant was breastfed	Infants under 6 months	Screening of non-exclusively breastfed children for referral Calculation of proportion of exclusively breastfed infants Monitoring of infant formula use
#2: if the infant drank any liquids		
#3: if the infant drank any infant formula		
#4: if the child consumed any foods		
#5: Everything the child ate yesterday during the day or at night.	Children 6-23 months	Child dietary diversity

Screening Results September 2022

Screening data was submitted by 7 partners. For their valuable contributions to this exercise, we warmly thank:

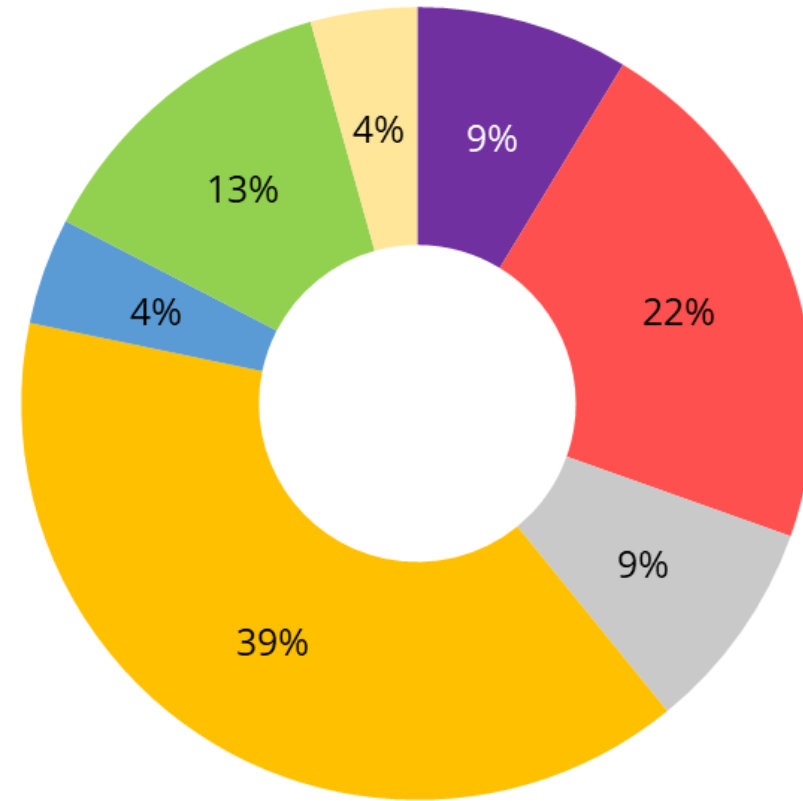
- Action contre la Faim
- Mekong Economics
- Parami Development Network
- Plan International
- Progetto Continenti Myanmar
- Tdh-L
- World Vision International

Their data was submitted from 23 screening exercises, from 19 townships, across 7 states or regions of Myanmar

Screening Results by State or Region

Among the 23 screening exercises, most of them took place in:

- Rakhine 39%
- Kachin 22%
- Yangon 13%

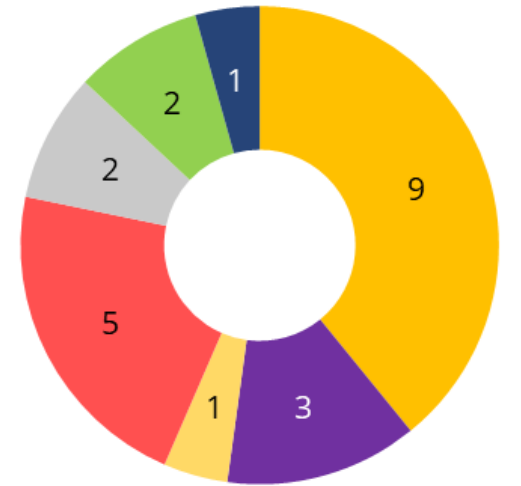


■ Chin ■ Kachin ■ Magway ■ Rakhine ■ Sagaing ■ Yangon ■ Shan

Screening Results by Partner

Among the 23 screening exercises, most were conducted by:

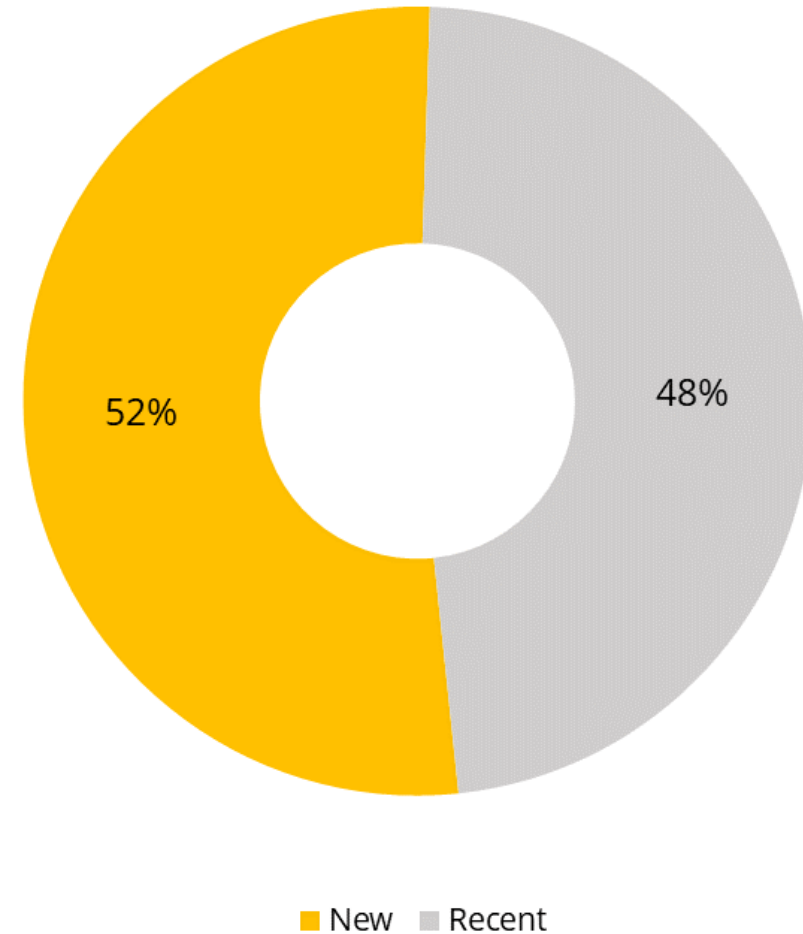
- Action contre la Faim (9)
- Plan International (5)
- Mekong Economics (3)



Screening Results New or Recent

Slightly more than half (12) of screening exercises were conducted in August 2022, presumably after the Phase I training was conducted among partners.

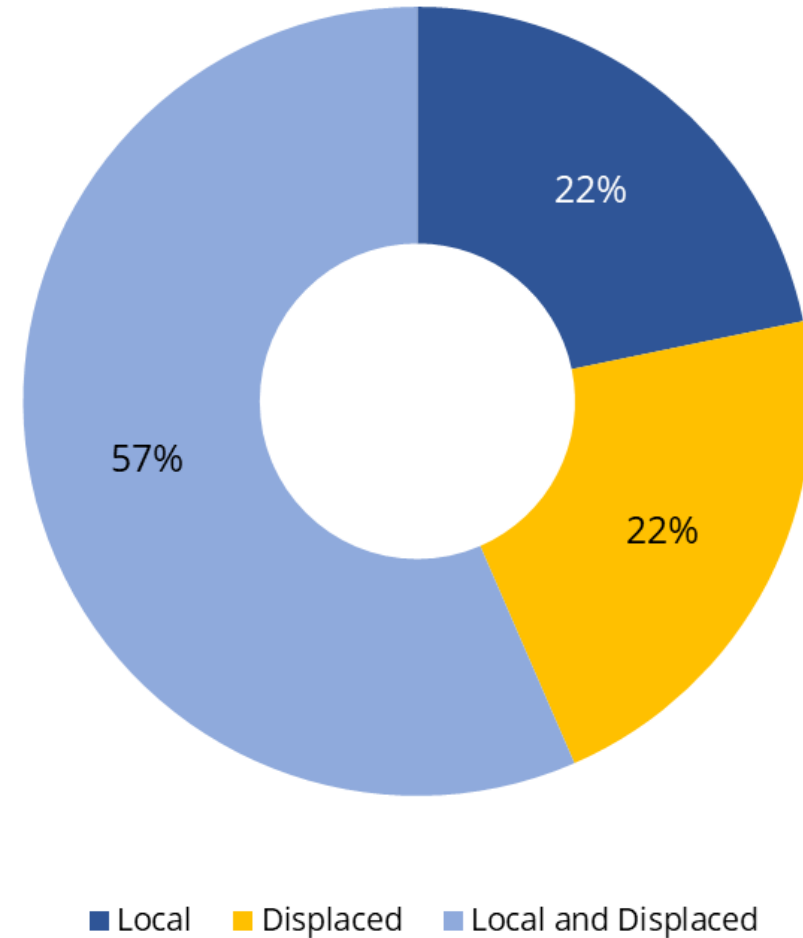
Slightly less than half (11) of screening exercises took place in the six months prior to the training and were reported using the SMART MUAC Tool.



Screening Results by Population

The screening population reflects whether the screening was conducted among the local population (5), a displaced population (5), or both.

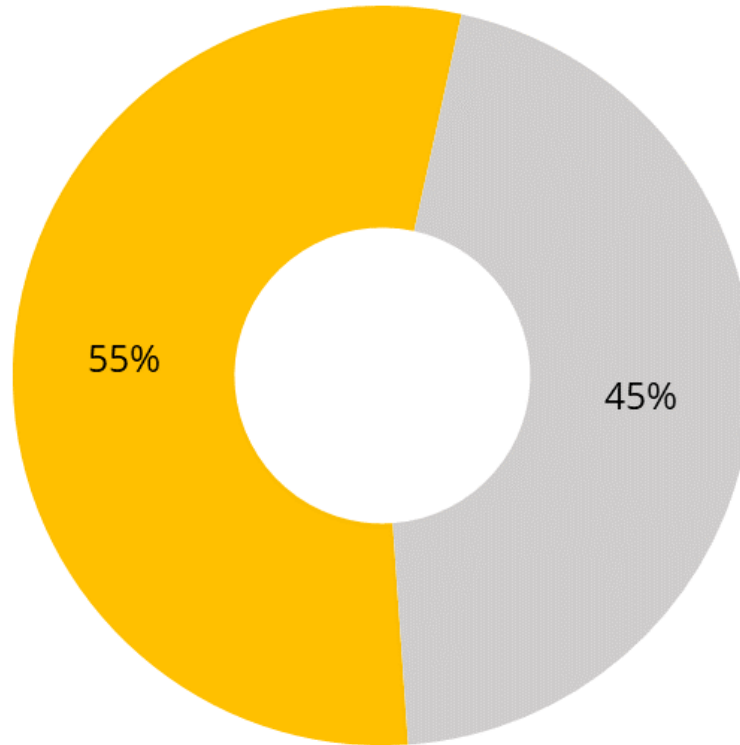
More than half (13) of screening exercises included both.



Screening Results – Age Weighting

In accordance with the SMART MUAC Screening Tool guidance: where less than 66% of children screened were over two years of age, weighting by age was applied to generate proxy prevalence.

More than half of the screening exercise results (12/22*) were weighted by age to generate more accurate results.



- Yes (<66% of children >2 years)
- No (≥66% of children >2 years)

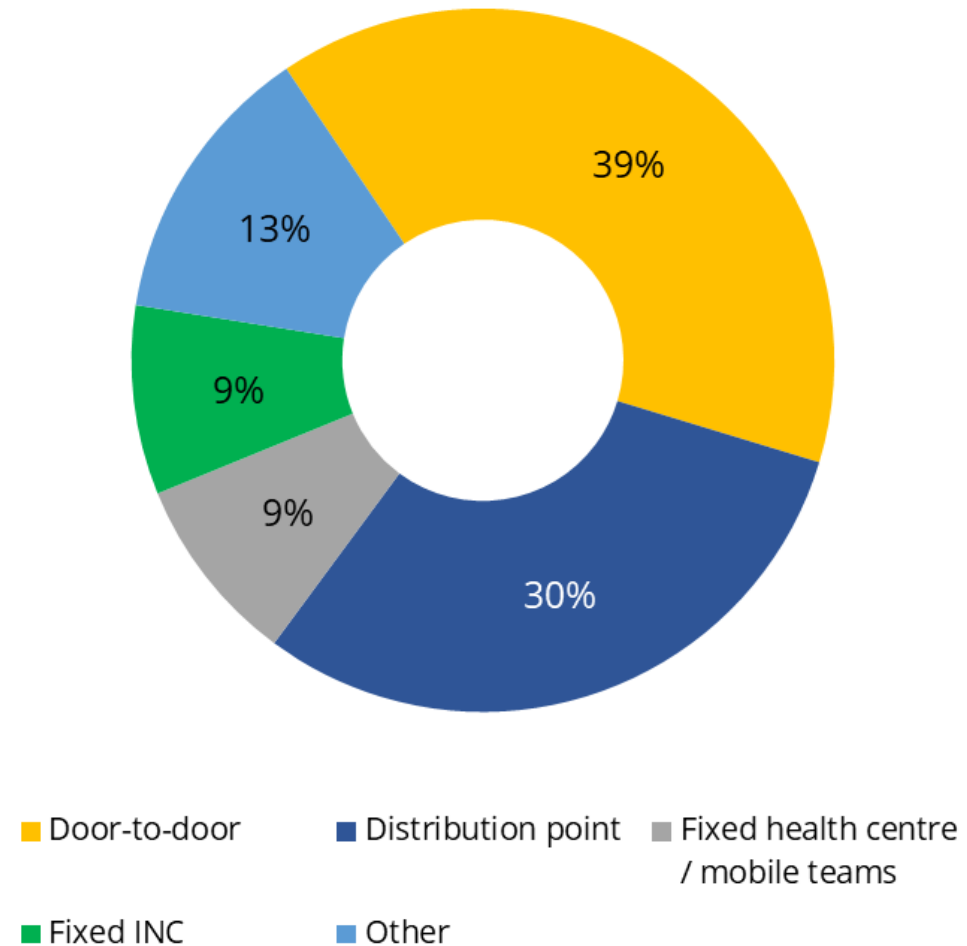
**screening exercise collected data among children 6-23 months only and therefore could not be weighted by age*

Screening Results by Screening Type

The screening type reflects the manner in which the screenings were conducted.

Data received from the 9* **Door-to-door screening exercises** were considered the most representative and reliable for the generation of proxy prevalence for a geographic area.

Screenings at fixed points are more likely to be affected by bias or represent only a subset of the population.



**One door-to-door screening exercise collected data among children 6-23 months only*

Screening Results by Screening Type

Data received from the 8 **door-to-door screening exercises** among children 6-59 months were considered the most representative and reliable for the generation of proxy prevalence for a geographic area. The resulting proxy-GAM results reflected this.

Screening Type	Proxy-GAM Range	N cases of oedema
Door-to-door (8)	0.0% - 5.9%	0
Distribution point (7)	0.7% - 29.2%	0
Fixed health centre / mobile teams (2)	6.9% - 62.7%	4 (verified by experienced staff and therefore included in the proxy prevalence)
Fixed INC (2)	31.9% - 49.0%	0
Other (Screening at home or church, 3)	0.0% - 3.6%	14 (<u>not</u> verified by experienced staff and therefore <u>not</u> included in the proxy prevalence)

Screenings at fixed points risk that more ill or malnourished children may remain in the home and not make it to the screening point, which can lower the proxy-prevalence results. Conversely, proxy-prevalence can be higher when a distribution targets a more vulnerable subset of the population.

Screenings at health facilities risk having very high proxy prevalence when an already ill or malnourished subset of the population is screened.

Screening Results among Door-to-Door Screenings

Among the 8 **door-to-door screening exercises** assessing children 6-59 months, additional information was requested to assess the exhaustiveness of the exercise and geographic representation of the results.

- **Screening exercise 14** screened an estimated 97.7% of children 6-59 months, this is nearly exhaustive, increasing confidence that the results reflect the true nutrition status of the population in the screening area (in this case, 35 villages in Sittwe Township).
- Although results only truly represent the geographic areas that were screened, the greater the proportion of geographic areas in a township screened the greater the relative geographic representation at township level. **Screening exercise 21** had the greatest geographic representation, with 62.1% of the wards and village tracts screened in Hlaing Thar Yar, although the exhaustiveness was low with approximately 15.8% of eligible children screened.

N	Township		% of wards, village tracts, or villages screened	Total estimated population of children 6-59 months	Number (%) of children 6-59 months screened	Proxy-GAM MUAC <125mm and/or oedema
10	Buthidaung	Action contre la Faim	3.5% (12/339) villages	2,694	1,341 (49.8%)	(35) 2.7%
13	Rathaedaung	Action contre la Faim	7.6% (15/197) villages	1,929	1,051 (54.5%)	(0) 0.0%
14	Sittwe	Action contre la Faim	39.8% (35/88) villages	7,155	6,988 (97.7%)	(190) 2.6%
15	Sittwe	Action contre la Faim	34.1% (30/88) villages	5,862	4,237 (72.3%)	(13) 0.8%
18	Thandwe	Action contre la Faim	5.7% (14/244) villages	1,222	1,084 (88.7%)	(20) 1.9%
20	Dagon Seikkan	World Vision International	28.2% (11/39) wards and villages tracts	4,214	4,009 (95.1%)	(10) 0.2%
21	Hlaing Thar Yar	Tdh-L	62.1% (18/29) wards and village tracts	35,964	5,672 (15.8%)	(337) 5.9%
22	Shwe Pyi Thar	Tdh-L	51.9% (14/27) wards and village tracts	21,277	2,627 (12.3%)	(145) 5.3%

Data Quality

In addition to sharing a consolidated summary of each screening exercise in the SMART MUAC Tool, when disaggregated MUAC data were shared it allowed for greater analysis and tests of data quality using ENA for SMART Plausibility Test.

Disaggregated data was shared for 7 screening exercises.

Sex ratio and **age ratio** were generally good or excellent.

MUAC digit preference (rounding to figures ending in '0' or '5') was problematic in three of the exercises.

General Information					ENA for SMART Statistical Test Result and Interpretation		
N ¹	Region State or	Organisation	Township	Number of children 6-59 months	Sex Ratio ²	Age Ratio	MUAC Digit Preference ³
1	Chin	Mekong Economics	Falam	51	(p=0.069) good	(p=0.071) good	(30) problematic
2	Chin	Mekong Economics	Hakha	28	(p=0.257) excellent	(p=0.959) excellent	(31) problematic
8	Magway	Projetto Myanmar	Continenti Minbu	128	(p=1.000) excellent	N/A ⁴	(8) good
9	Magway	Projetto Myanmar	Continenti Natmauk	166	(p=0.162) excellent	N/A	(16) acceptable
19	Sagaing	Mekong Economics	Kale	121	(p=0.785) excellent	(p=0.422) excellent	(6) excellent
23	Shan	Parami Development Network	Keng Tung	131 ⁵	(p=0.097) good	N/A	(37) problematic
20	Yangon	World International	Vision Dagon Seikkan	4,009	(p=0.048) acceptable	(p=0.704) excellent	(10) good

Limitations

- When many data collectors are used, providing direct technical training, coaching, and supervision can be challenging and lack of supervision or support may reduce data quality.
- Where weight-for-height data is not collected, a proportion of wasting cases will go undetected during a screening.
- Much of the screening data included in this report were collected at central locations such as health facilities, nutrition programmes, or food distribution sites. Such screening types are prone to bias and must be interpreted with caution.
- Townships with a small proportion of screened villages/wards (low geographic representation) are less representative at township level and should be interpreted appropriately. Further, data collected in a specific area cannot be extrapolated to other areas with confidence.
- Most of the screening data included in this report was collected in areas benefiting from nutrition programming. Extrapolation to areas without similar programming is limited.

Conclusion

Data was submitted by 7 partners from 23 screening exercises across 19 townships across 7 states or regions of Myanmar

Of these screening exercises, 8 collected data from children 6-59 months of age in a door-to-door manner, providing the most reliable proxy prevalence results. Among these 8 door-to-door screening exercises, proxy prevalence ranged from:

- 0.0% to 5.9% proxy-GAM
- 0.0% to 5.8% proxy-MAM
- 0.0% to 1.3% proxy-SAM

One screening exercise included information to assess Minimum Dietary Diversity among children 6-23 months (the result was 2.3%).

No data was submitted on exclusive breastfeeding or the use of infant formula.

Data quality tests were applied to 7 screening exercises. For 3 of these screening exercises the MUAC digit preference was considered 'problematic' due to rounding of figures.

Recommendations

- Where possible, partner organisations should conduct refresher trainings for their CHWs focused on taking quality MUAC measurements and the identification of cases of oedema
- Cases of oedema should systematically be verified by clinicians or experienced practitioners during the screening exercise, either in-person or by photo
- Where possible, partner organisations should integrate IYCF-E into their screening to ensure that non-breastfed infants are referred for support
- This process of reporting, reviewing, and analysing MUAC and oedema screening data (utilising the SMART MUAC Tool) and IYCF-E screening data with findings consolidated in a report should be scaled up and repeated regularly in order to monitor the nutrition situation in Myanmar
- The Nutrition Cluster should consider harmonizing the MUAC and oedema reporting process so that routine screening results can be interpreted using the SMART MUAC Tool

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Thank you

For more information,
please reference the
September 2022 screening exercise final report