# Nutrition and Mortality Monitoring

# in IDP Populations

## Report on Round 2 - August 2022

### Report issued: 19/09/2022



Photo taken by GREDO data collection team in a camp for newly arrived IDP in Baidoa, August 2022

## Executive Summary

This is the second report from the 2022 Nutrition and Mortality Motioning System project. This sentinel site data collection aims to provide near real-time data on the evolution of the crisis and the adequacy of the humanitarian response. The urgency of ensuring a timely humanitarian response and monitoring was underlined by the projection of famine for areas of Somalia, made by the IPC on September 5th, 2022.

Between July 18th and August 2nd , 2022, data was collected from 2,244 households in 16 IDP sites in Khada and Daynille in the Afgooye Corridor, Baidoa, and Diinsor. IDP had originated from villages in a variety of districts, mainly from Bay, Lower Shabelle and Bakool. 89% of the residents in the camps recruited in round 2 were from the Digil and Mirifle clan.

Water was sourced mainly from standpipes in Khada, tankers in Daynille, tankers and wells or springs in Baidoa, and donkey cart vendors in Dinsoor. More than 25% of households in Baidoa and Daynille, and more than 70% in Dinsoor reported inadequate access to drinking water sometimes or often during the last 4 weeks. Use of pit latrines was also poor and open defecation was practiced by over 50% of households in Daynille, Baidoa, and Dinsoor.

To assess the availability of toilets in the different IDP sites the location of all toilets was mapped. It was found that the average number of toilets per camp was 5.4. Four camps had no toilets at all and the average number of people per toilet, overall, was 153. Sphere standards for sanitation was met in only one of the 16 camps.

Child malnutrition was at *critical* levels with GAM by MUAC ranging in all 4 areas between 21 and 23%. Enrolment in malnutrition treatment services had improved in most locations since round 1 but do still not meet Sphere standards, with only 66% of SAM cases attending an OTP and 74% of MAM cases attending an OTP or SFP. Coverage is lowest in the camps in Baidoa.

Only 18% of children aged 0-59 mo. possessed a health record card and measles vaccination coverage was found in only 42%, overall. The two week period prevalence of suspected measles had decreased since round 1 to 3.6%. However, there is no guarantee this trend will continue and there remains an urgent need to implement a vaccination campaign.

Vaccination with the oral cholera vaccine (OCV) had increased slightly and was reported by 34% of children aged 12-59 mo., and the two week period prevalence of acute watery diarrhoea had fallen to 13.6%.

Mortality has decreased since round 1 but was found to still be at *emergency* levels, with a U5DR of 2 and a CDR of 1 deaths/10,000/day.

Data from August 2022 indicates that IDP populations are still experiencing a very serious nutrition and health crisis. Acute malnutrition in children is at critical levels, there is a continued threat from measles and AWD infections, crude and under-five death rates are at emergency levels, and there are serious gaps in the provision of life saving interventions for WASH, vaccination, and malnutrition treatment. An intensified humanitarian response is required to deal with the serious health and nutrition situation in newly arrived IDP, and try and ensure that the projected famine does not materialise.

# Contents

# Introduction

This is the second report from the Nutrition and Mortality Monitoring System (NMS) 2022 project, that was set up to track the health and nutrition situation in IDP populations.

Somalia is currently experiencing a prolonged and devastating drought and famine has now been projected by the IPC to affect parts of the country before the end of 2022. The Building Resilient Communities in Somalia consortium (BRCiS), led by the Norwegian Refugee Council, is running this project in partnership with Evidence for Change (e4c), as part of their response to the ongoing drought emergency and famine prevention.

This sentinel site data collection aims to provide monthly updates on the situation of vulnerable groups in purposively selected locations in Banadir, Baidoa, and Dinsoor.

# Methods

## Sampling

The Nutrition and Mortality Monitoring System (NMS) approach[1] was used to collect data from a purposively selected sample of IDP sites/camps. Details of the sampling and data collection methods can be found in the Round 1 report.[2]

IDP settlements in Khada, within the Afgooye Corridor, Baidoa, and Dinsoor were included in Round 1 and the area of Daynille was added in Round 2. Additional camps from new areas in Baidoa were also added. The sample in Round 2 therefore contains a mix of camps that we previously sampled in Round 1 and camps that were selected to represent, as far as possible, the most recent arrivals into the Afgooye Corridor and Baidoa.

## Team training

Hybrid trainings were conducted by an e4c consultant with support from health and nutrition officers from participating BRCiS members. Team training was conducted remotely via video link. The e4c consultant conducted a 1-day refresher training for community health workers (CHW), enumerators, and supervisors prior to the start of data collection for Kahda, Baidoa, and Diinsor teams, and a 2-day training for the teams working in Daynille. During this training, an overview of different types of malnutrition, a virtual demonstration of MUAC measurements, the assessment of oedema, and the identification of suspected measles were provided. The data collection process was also piloted the mock interviews conducted with the CHWs and enumerators. Nutrition officers provided live demonstration of MUAC measurements and the assessment of oedema.

## Data collection

Data was collected at household level by trained CHW and enumerators. The questionnaire was developed by e4c after consultation with BRCiS and other experts working on Somalia. It was developed

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[1] Seal, A. J., et al. (2021). "Use of verbal autopsy for establishing causes of child mortality in camps for internally displaced people in Mogadishu, Somalia: a population-based, prospective, cohort study." Lancet Glob Health 9(9): e1286-e1295.
[2] https://reliefweb.int/report/somalia/nutrition-and-mortality-monitoring-idp-populations-report-round-1-july-2022-report-issued-15082022

in English and was later translated in Somali. The data collection form was piloted and revised based on the feedback from teams during the training sessions. It was coded in ODK and data was uploaded to the ONA Systems server. Data collectors used mobile phones or tablets running the Android operating system.

As summarised in Table 1, in Round 1 data collection took place between July 18th and August 2nd , 2022 and Round 2 between August 21st and September 10th. Teams were comprised of two CHW or enumerators, one of which conducted the interviews and one who performed the MUAC measurements. Data collection took approximately 20 minutes for each household and teams averaged 10 households per day.

The questionnaire included questions on household demographics, area of origin and clan affiliation, date of arrival in the IDP site, spoken dialects/languages, household WASH, possession of child-health record cards, vaccination status, morbidity and mortality. Questions on morbidity included symptoms of measles and acute watery diarrhoea (AWD) experienced during the last 2 weeks. MUAC measurements were taken on children 6-59 months in duplicate and, in the event that the difference in measures was greater than 0.5 cm, a third measure was taken and the mean of the two measurements with the best agreement was used.

## Data management

MUAC measurements and questionnaire data collected by the CHW and enumerators were entered into the ODK data form on mobile phones or tablets running the Android operating system. Data was uploaded to a server run by ONA after forms were finalised, and an internet connection was available. The data files were then downloaded from the ONA server in .csv format and loaded into Excel for analysis. Unique IDs for each household and individual were created during data collection using a unique household identifier number and sequential individual ID numbers within each household. To avoid the creation of duplicate ID numbers a paper 'cluster control sheet' was used to monitor the collection of data by each team. To find households that had been previously interviewed, household identifiers were uploaded to the digital devices so that the household identify could be confirmed at the start of each interview.

## Data analysis

Data analysis was performed in Excel 2019 using pivot tables and macros written in VBA. Pie charts and graphs were also created in Excel. The prevalence of GAM and SAM by MUAC was calculated taking in to account the prevalence of nutritional oedema.

The under-five and crude death rates were measured using separate recall periods for households newly enrolled during Round 2 and these that had been previously interviewed in Round 1. A memorable date of July 9th 2022, which coincides with Eidul-Adha, was used for new households and the time since the previous interview was used for the others. Household members that joined, left, or died within the recall period contributed half the of the recall period to the rate denominator. To cross-check that the date of death fell within the recall period follow-up questions were asked to confirm the number of weeks since the death occurred, and whether the location of the death was consistent with the household's date of arrival in the IDP camp. These were used during analysis to exclude any deaths that occurred outside of the recall period, or deaths that had occurred in a location outside of the IDP camp after the household reported arriving in the camp.

As in Round 1, a verification exercise was performed to confirm the deaths reported in camps with higher than average death rates. To ascertain if these deaths had been correctly validated a follow-up interview was carried out the days immediately following the end of the main data collection exercise. This verification interview was conducted by two members of the original data collection team that had been

specially trained on the how to conduct the interview and it was ensured that no household was re-interviewed by the same CHW that had conducted the main data collection interview. This verification exercise was conducted over 2 days and resulted in the exclusion of 4 reported deaths. The results from one household were identified as coming from 'dummy houses' and all data from this household was excluded from the analysis reported in the report.

To assess whether conditions within IDP camps are improving or deteriorating over time, bar graphs or tables were prepared to show key indicators for each camp and how they changed between data collection rounds. If the humanitarian response is adequate a positive improvement in performance and outcome indictors is expected as the time since arrival increases.

# Results

## IDP Sample Characteristics

The characteristics of the samples collected in each IDP site are described in table 1. In total, data was collected from 2,244 IDP households in 16 sites. The sampled households contained 12,409 individuals, including 1,779 mothers/caregivers and 2,618 children under-five.

The average time since arrival at the IDP site was 3.6 months, ranging from less than one month up to 36 months. As shown in Figure 1, the IDP that that were from the camps newly recruited in Round 2 had migrated mainly from the regions of Bay, Lower Shabelle, Bakool, and Middle Shabelle. The pattern of migration was similar to that observed for the camps that had been recruited in Round 1.

## Table 1: Data collection summary

| Area | BRCiS Partner | IDP site | Round 1 (18th Jul - 2nd Aug) | | | Round 2 (21st Aug - 10th Sep) | | | Change | | Months since arrival[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Households | Population | Household size | Households | Population | Household size | HH | Pop. | |
| Kahda - Banadir | Action Against Hunger | Wabiyarow | 198 | 1,092 | 5.5 | 190 | 1079 | 5.7 | -8 | -13 | 4.1 (2,26) |
| | | Kuntuwareey | 241 | 1,310 | 5.4 | 227 | 1283 | 5.7 | -14 | -27 | 4.1 (2,25) |
| | | Canoole | 164 | 680 | 4.1 | 144 | 652 | 4.5 | -20 | -28 | 5.8 (2,30) |
| *Combined* | | | 603 | 3,082 | 5.0 | 561 | 3,014 | 5.4 | -42 | -68 | 4.7 (2,30) |
| Daynille - Banadir | IRC | Durdur | - | - | - | 247 | 1045 | 4.2 | - | - | 2.5 (0,8) |
| | | Horseed | - | - | - | 311 | 1701 | 5.5 | - | - | 1.5 (1,4) |
| | | Furuqly | - | - | - | 117 | 566 | 4.8 | - | - | 2.5 (1,6) |
| *Combined* | | | - | - | - | 675 | 3,312 | 4.8 | - | - | 2.2 (0,8) |
| Baidoa City | GREDO | Bogey | 109 | 570 | 5.2 | 79 | 571 | 5.2 | -30 | 1 | 3.0 (1,11) |
| | | Abag Dheere | 122 | 511 | 4.2 | 110 | 482 | 4.1 | -12 | -29 | 2.1 (1, 6) |
| | | Barbaare | 79 | 511 | 6.5 | 63 | 497 | 6.4 | -16 | -14 | 4.9 (1, 19) |
| | | War Ajiin | 126 | 754 | 6.0 | 113 | 724 | 6.4 | -13 | -30 | 4.7 (1, 24) |
| | | Garas | - | - | - | 149 | 869 | 5.8 | - | - | 1.8 (0,6) |
| | | Lowfooraar | - | - | - | 131 | 664 | 5.1 | - | - | 1.7 (0,9) |
| *Combined* | | | 436 | 2,346 | 5.5 | 645 | 3,807 | 5.5 | -71 | -72 | 3.0 (0, 24) |
| Dinsoor Town | GREDO | Biilale One | 119 | 669 | 5.6 | 94 | 623 | 5.5 | -25 | -46 | 7.3 (1, 11) |
| | | Biilale Two | 165 | 914 | 5.5 | 125 | 864 | 6.0 | -40 | -50 | 4.5 (1, 36) |
| | | Korkaamare | 95 | 460 | 4.8 | 80 | 423 | 4.7 | -15 | -37 | 4.2 (1, 11) |
| | | Tunida | 73 | 441 | 6.0 | 64 | 366 | 6.0 | -9 | -75 | 2.5 (1, 5) |
| *Combined* | | | 452 | 2,484 | 5.5 | 363 | 2,276 | 5.5 | -89 | -208 | 3.8 (0, 35) |

[1] mean and range

Five households withheld consent during Round 2; 2 from Baidoa and 3 from Dinsoor. Data was not collected from these households and they are not included in the data tables.
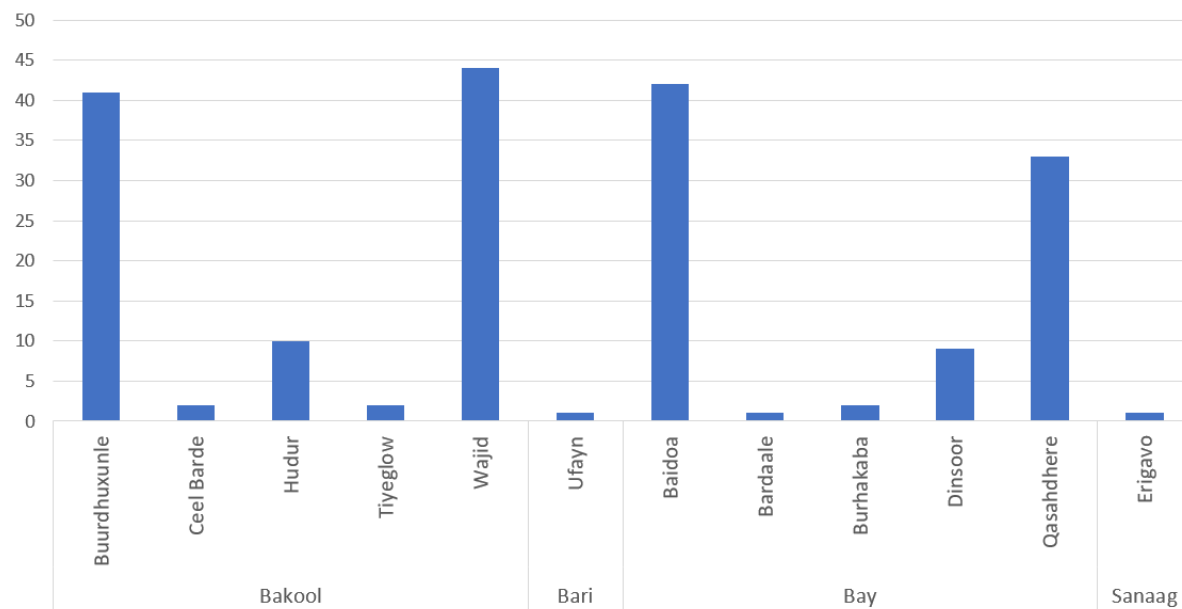
### Figure 1 - Region & District of Origin of IDP Mothers/Caregivers Recruited in Round 2

(a) New arrivals in camps in Daynille, Banadir (n=483)
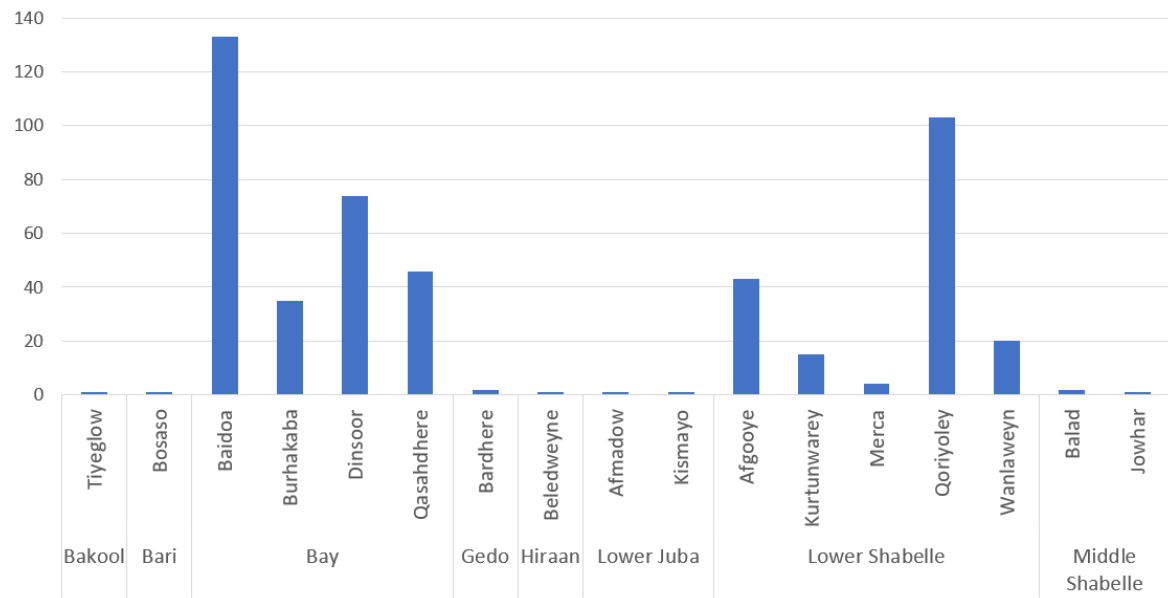


(b) New arrivals in camps in Baidoa (n=188)

The clan affiliation of the IDP mothers/caregivers who were newly recruited during Round 2 is shown in figure 4. The great majority of displaced people in the new arrival camps in Daynille and Baidoa continue to belong to the Digil and Mirifle (Rahanweyn) clans.

*Figure 2 - Clan of IDP Mothers/Caregivers in Camps Recruited Round 2 (n=671)*
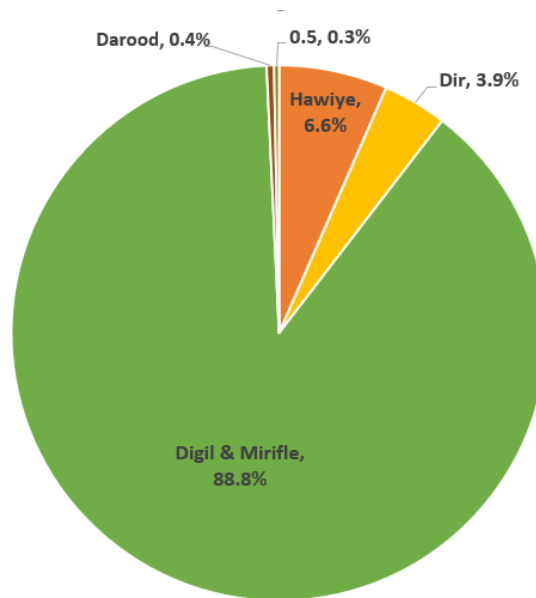


## WASH

The household WASH situation in IDP camps in Kahda, Baidoa, Dinsoor and Daynille is shown in the 3 figures below. The predominant water source varied by location with public taps most frequent in Kahda, tankers in Baidoa and Daynille, and water vendors/donkey carts in Diinsor.

Drinking water adequacy was an issue for some households in all 4 locations, but as in Round 1, it continued to be the most marked in Diinsor, where 61% of households reported drinking water was sometimes or often inadequate, and 0.3% reported that drinking water was always inadequate. However, these proportions had improved very slightly since Round 1. In both Baidoa and Daynille more than a quarter of households reported that drinking water adequacy was sometimes a problem.

Disposal of faeces was found to be a substantial problem. Defecation in the open field was reported by a substantial proportion of respondents in Baidoa, Dinsoor, and Daynille, with more than half of households reporting this as their normal method in these areas. With an average household size of 5.3 persons, this implies that about 5,000 people are defecating in open areas from the 16 camps covered by the NMS alone. Given that hundreds of camps are found in these locations this suggests a very substantial population is at high risk of faecal oral contamination and consequent infection. The situation was better in Khada where more than 95% of households used a pit latrine and only 2% of households reported defecation in the open field.

To compare trends in WASH indicators between data collection rounds a score for drinking water inadequacy was calculated and is shown in Table 2. An increasing score indicates more inadequate access

to drinking water. The scores reveal that, overall, the adequacy of drinking water access has improved in Kahda but deteriorated in both Baidoa and Dinsoor.

Use of pit latrines was also compared by looking at the proportion of households that reported using them in Round 1 and Round 2. The results, also shown in Table 2, indicate a good improvement in access to pit latrines in Kahda, where 96% of households reported use round Round 2, but poor access in the other sites, with only 4 out of 10 people using them in Dinsoor and Daynille, and a marked decrease in use in Baidoa.

To assess the availability of toilets in the different IDP sites the data collection teams mapped the location of all toilets and recorded the type of structure and their GPS coordinates. It was found that the average number of toilets per camp was 5.4. Four camps had no toilets at all and the average number of people per toilet, overall, was 153. The Sphere standards specify that there should be no more than 50 people per toilet during the early phase of an emergency. This standard was met in only one of the 16 camps. The WASH sector is currently failing to meet Sphere standards on access to toilets and safe disposal of excreta.[3]

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[3] Excreta management standard 3.2: Access to and use of toilets
https://handbook.spherestandards.org/en/sphere/#ch006_005

Figure 3: Main Sources of Household Drinking Water by Area (n=2,175)
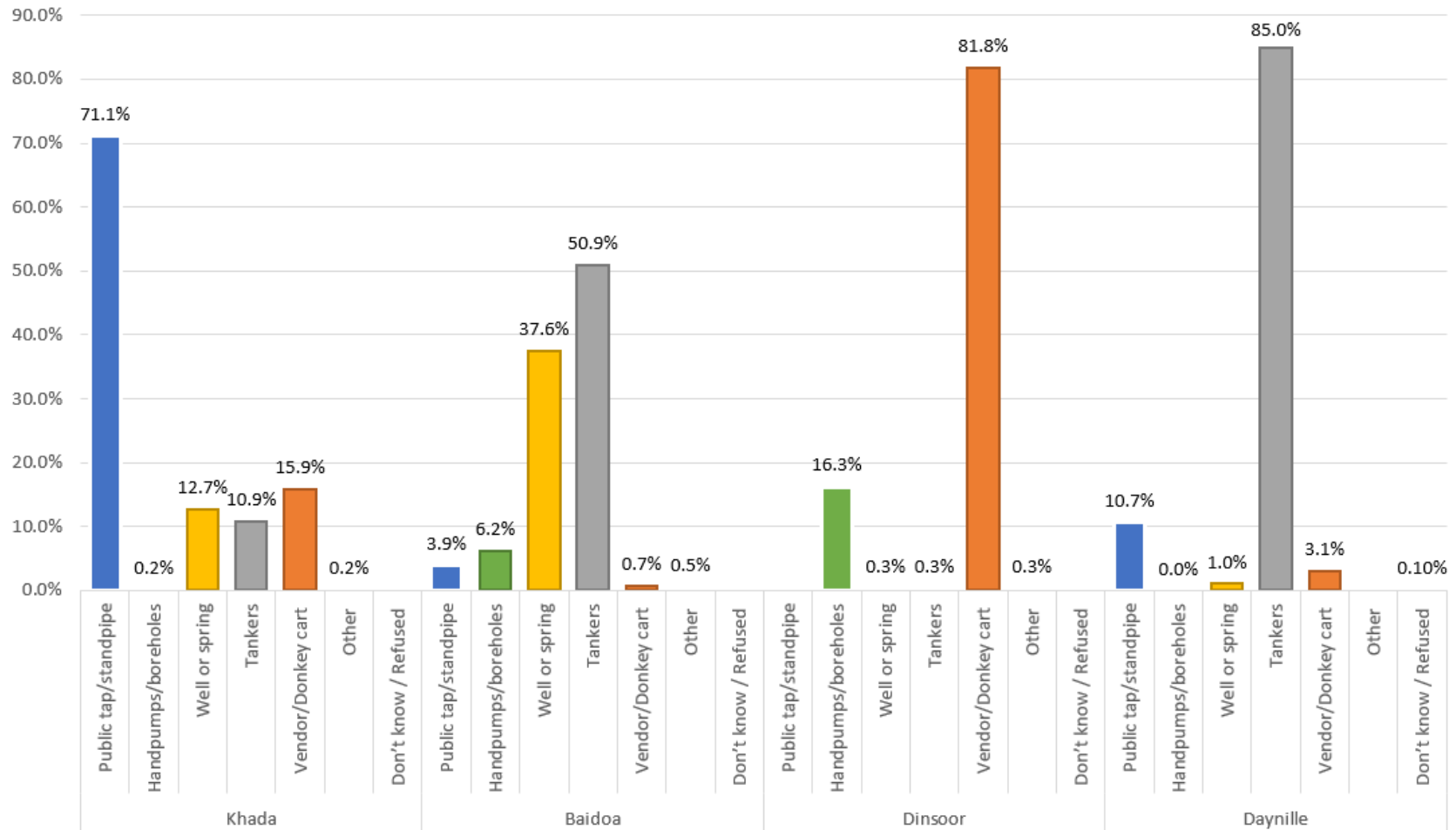
It is important to note the increased use of tankers in Khada where reliance on this water sourced had increased by 10 percentage points since Round 1. There is also a very high dependency on water from tankers in the new camps in Daynille, and it also is the main source for the majority of IDP households in Baidoa.

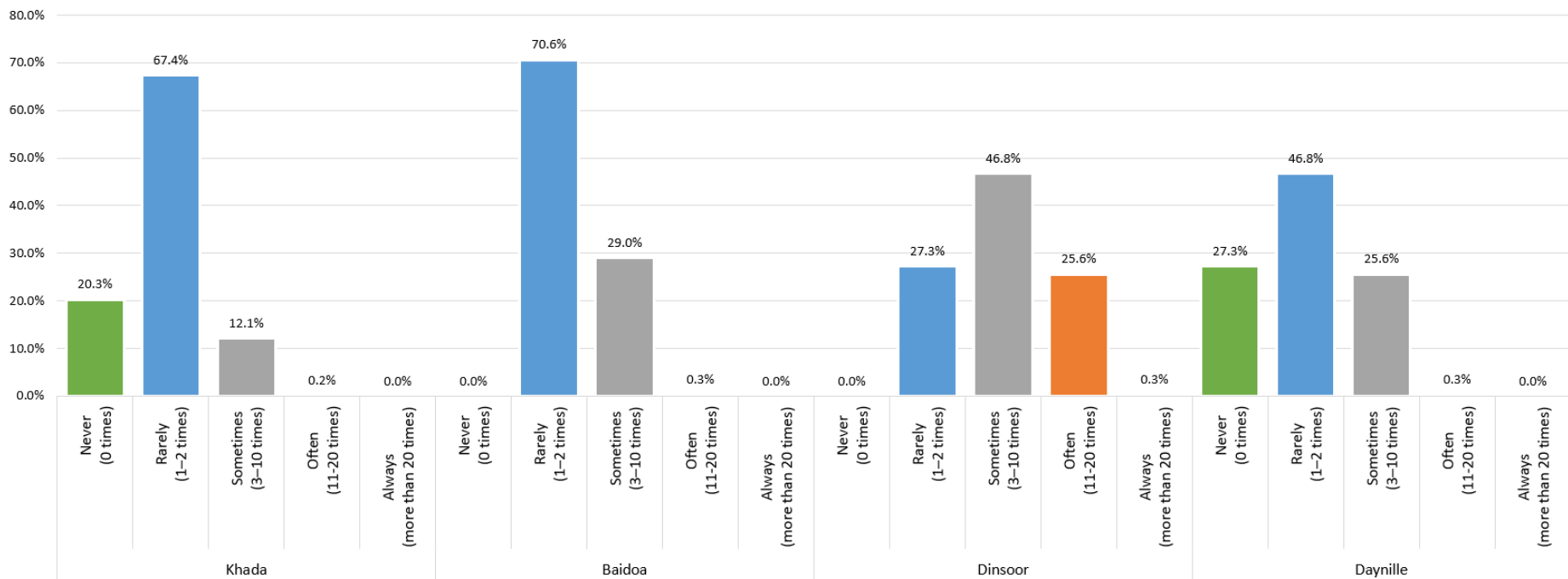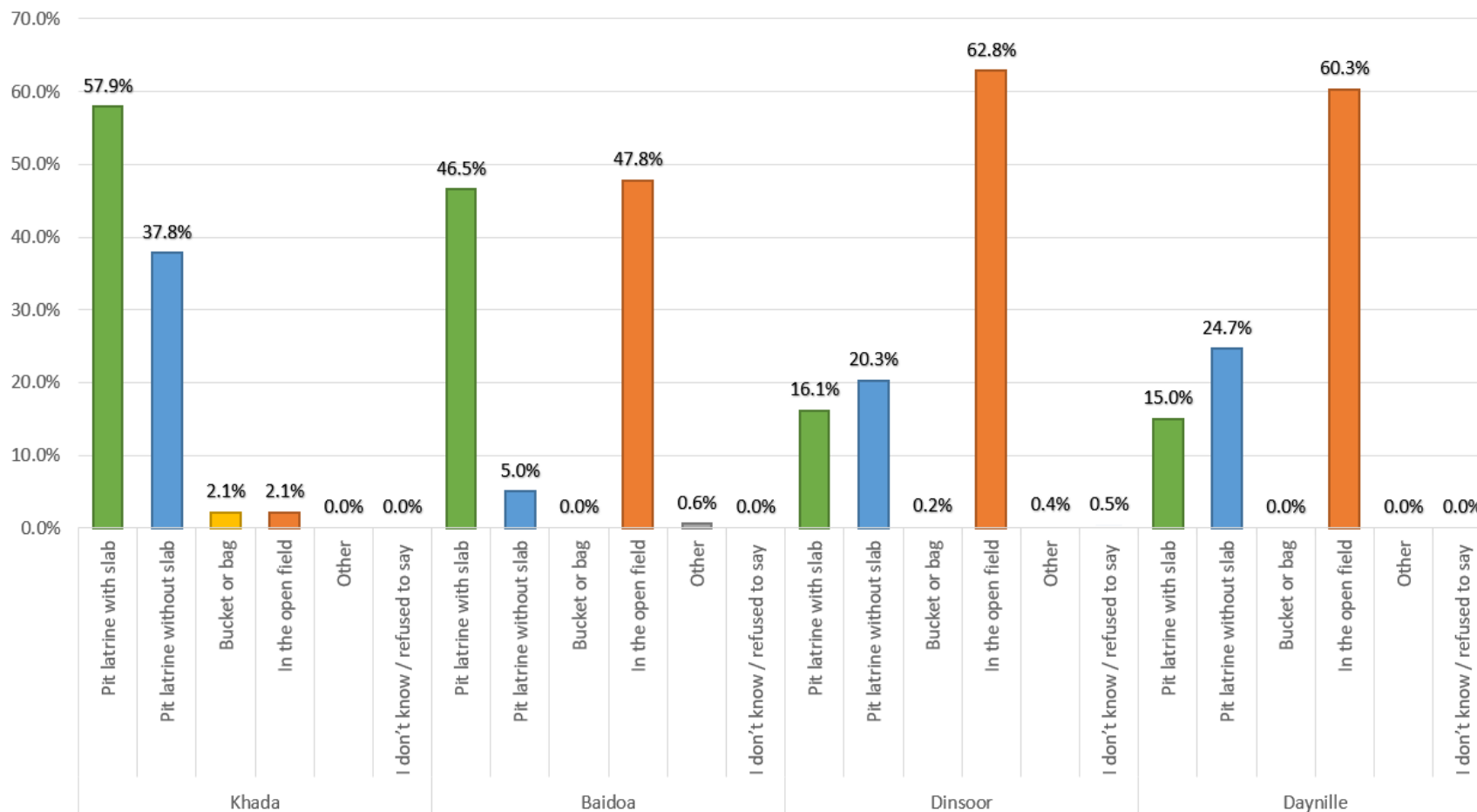*Figure 4: Frequency of Inadequate Household Drinking Water by Area (n=2,175)*

Figure 5: Household Defecation Site by Area (n=2,279)

*Table 2: Changes in Drinking Water Adequacy and Use of Pit Latrines between Round 1 and Round 2*

| | Frequency of inadequate drinking water | | | | | Use of pit patrines[2] | | | | |
| | Round 1 | | Round 2 | | Change in score | Round 1 | | Round 2 | | Change (% points) |
| | N | *Score* | N | *Score* | | N | *%* | N | *%* | |
| Kahda | 596 | 2.1 | 556 | 1.9 | -0.2 | 407/596 | 68.3% | 537/561 | 95.7% | +27% |
| Baidoa | 337 | 2.4 | 582 | 2.5 | 0.1 | 231/337 | 68.5% | 328/636 | 51.6% | -17% |
| Dinsoor | 333 | 3.0 | 359 | 3.4 | 0.4 | 144/333 | 43.2% | 149/409 | 36.4% | -7% |
| Daynille | - | - | 673 | 2.2 | - | - | - | 267/673 | 39.7% | - |
| **Combined** | 1,266 | 2.4 | 2,175 | 2.4 | 0.0 | 782/1266 | 61.8% | 1,281/2,279 | 56.2% | -6% |

[1] Drinking water inadequacy scores are calculated based on the reported frequency of inadequate supply, with a larger score indicating that there was a greater number of times in the last month when there was not adequate drinking water for the household.

[2] Use of pit latrines is calculated as the proportion of households that reported using a pit latrine, with or without a slab, as their usual defecation site.

## Acute Malnutrition

The GAM by MUAC prevalence measured in all 4 areas exceeded the threshold of 15% for IPC Phase 4/5 (Critical) Acute Malnutrition.[4] The prevalence was highest in Kahda where it had increased slightly since Round 1 and reached 23%.  However, a decrease in GAM by MUAC prevalence was observed in Baidoa and Dinsoor since Round 1, with an overall reduction in prevalence of 13%.

*Table 3: Prevalence of GAM by MUAC in Sentinel Site Camp Areas*

| Area | Sex | Round 1 | | | | | Round 2 | | | | | Change (% points) |
| | | N (%) | Age (mo.) | Oedema | GAM (MUAC < 12.5 cm or oedema) | | N (%) | Age (mo.) | Oedema | GAM (MUAC < 12.5 cm or oedema) | | |
| **Kahda** | All | 752 | 31.4 | 0 | 158 | 21.0% | 680 | 32.3 | 0 | 153 | 22.5% | +1.5 |
| | Male | 371 (49.3%) | 31.1 | 0 | 69 | 18.6% | 342 (50.3%) | 32.8 | 0 | 66 | 19.3% | |
| | Female | 381 (50.7%) | 31.5 | 0 | 89 | 23.4% | 338 (49.7%) | 31.7 | 0 | 87 | 25.7% | |
| **Baidoa** | All | 423 | 28.4 | 0 | 120 | 28.4% | 681 | 30.6 | 0 | 148 | 21.7% | -6.7 |
| | Male | 218 (51.5%) | 27.7 | 0 | 58 | 26.6% | 351 (51.5%) | 30.3 | 0 | 75 | 21.4% | |
| | Female | 205 (48.5%) | 29.1 | 0 | 62 | 30.2% | 330 (48.5%) | 30.8 | 0 | 73 | 22.1% | |
| **Dinsoor** | All | 495 | 29.7 | 0 | 115 | 23.2% | 450 | 31.1 | 0 | 96 | 21.3% | -1.9 |
| | Male | 263 (53.1%) | 30.1 | 0 | 53 | 20.2% | 245 (54.4%) | 31.6 | 0 | 47 | 19.2% | |
| | Female | 232 (46.9%) | 29.1 | 0 | 62 | 26.7% | 205 (45.6%) | 30.5 | 0 | 49 | 23.9% | |
| **Daynille** | All | - | - | - | - | - | 581 | 29.8 | 0 | 124 | 21.3% | - |
| | Male | - | - | - | - | - | 321 (55.2%) | 29.5 | 0 | 62 | 19.3% | |
| | Female | - | - | - | - | - | 260 (44.8%) | 30.3 | 0 | 62 | 23.8% | |

*IPC* levels of acute malnutrition: *Critical-Extremely Critical* (>15.0% GAM by MUAC)
*Serious-Critical* (10.0 - 14.9% GAM by MUAC)
*Alert-Serious (5.0 - 9.9%* GAM by MUAC)
Acceptable-Alert (<5.0% GAM by MUAC)

The changes in prevalence of MAM and SAM are shown for individual camps in figure 6. A fall in the percentage of children with GAM by MUAC was marked in a number of camps, including War Ajin, where it fell by 16 percentage points, and  in Korkaamare, where no cases of SAM were detected in Round 2. Across all the camps included in Round 1, GAM decreased in 5 of these. However, GAM also increased in 4 camps and  it remains above the critical threshold in 12 out of the 16 camps assessed in Round 2, and above 30% in 4 camps. Of particular note was the sharp rise in both MAM and SAM in Canoole camp,  in Khada, where GAM increased by 12 percentage points between Round 1 and Round 2. Overall, the MUAC

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[4] IPC Technical Manual Version 3.0, Evidence and Standards for Better Food Security and Nutrition Decisions (2019)

data indicates some improvement since Round 1 but a very serious nutrition situation persists in newly arrived IDP and in most of the camps previously assessed in Round 1.

*Figure 6 Prevalence of SAM and MAM by MUAC in Individual Camps at Round 1 and 2[1,2]*
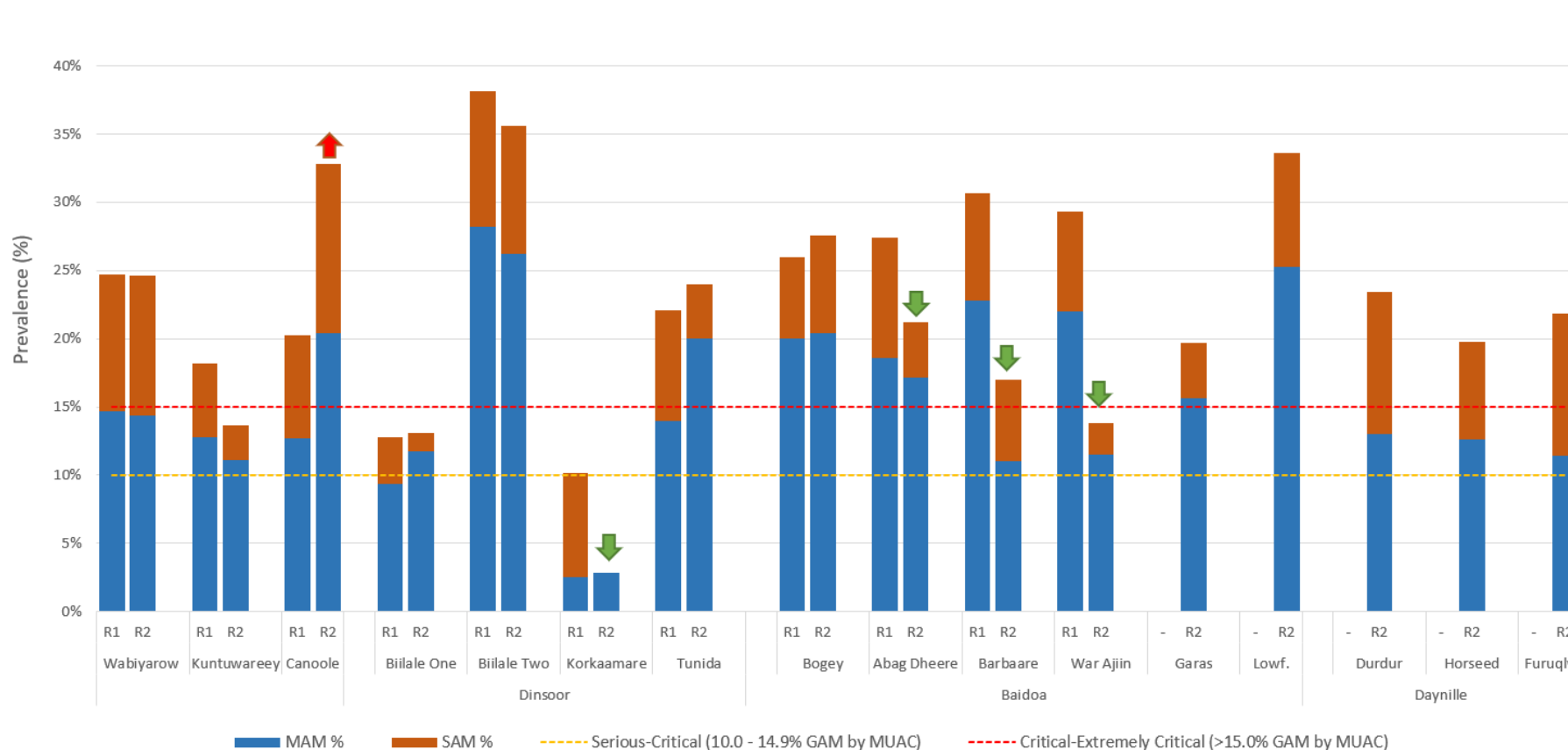
[1]Lowf. = Lowfooraar; [2] An increase or decrease of 5% or more is indicated by a red or green arrow

## Coverage of nutrition treatment programs

Enrolment in Selective Feeding Programmes is described in table 4. Overall, programme coverage in Round 2 was 74% for MAM and 66% for SAM, with Baidoa showing the lowest programme coverage. In almost all the areas assessed in Round 1 there were improvements observed in programme coverage, with the

exception of SAM treatment in Khada. Despite the improvements seen since Round 1, in no area was the target coverage of >90% achieved yet for MAM or SAM treatment.

*Table 4: Coverage of Selective Feeding Programmes for Children, Aged 6-59 months, with MAM by MUAC or SAM by MUAC*

| | Moderate Acute Malnutrition (MUAC < 12.5 & ≥ 11.5 cm) | | | | Severe Acute Malnutrition (MUAC < 11.5 cm or oedema) | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Percentage and number of cases in OTP or SFP | | | | Percentage and number of cases in OTP | | | |
| Area | Round 1 | Round 2 | Change | > 90% Coverage [1] | Round 1 | Round 2 | Change | > 90% Coverage[1] |
| **Khada** | 74 % (75/101) | 90 % (88/98) | +16 % | NO | 83 % (45/57) | 64 % (34/53) | -19 % | NO |
| **Baidoa** | 39 % (34/88) | 42 % (47/112) | +3 % | NO | 19 % (6/32) | 46 % (16/35) | +27 % | NO |
| **Diinsor** | 41 % (32/79) | 87 % (66/76) | +46 % | NO | 78 % (28/36) | 90 % (18/20) | +12 % | NO |
| **Daynille** | - | 89 % (65/73) | - | NO | - | 73 % (37/51) | - | NO |
| **Combined** | 53 % (141/268) | 74 % (266/359) | +21 % | NO | 63 % (79/125) | 66 % (105/159) | +3 % | NO |

[1,2] https://handbook.spherestandards.org/#ch007_004_001

## Morbidity

Possession of a child health record card was assessed for all children less than 5 years of age. All types of vaccination cards, health passports, and other record cards were counted. Coverage ranged from a low of 9% in Diinsor up to 34% in Kahda. There had been a marked improvement in coverage in Kahda and some improvement in Dinsoor. However, coverage had fallen in the Baidoa camps. Overall, the coverage of health record cards remains very low and the challenge of monitoring the delivery of essential child health and nutrition services persists.

*Table 5: Possession of a Health Record Card in Children aged 0-59 months*

| Area | Round 1 | | Round 2 | | Change (% points) |
|---|---|---|---|---|---|
| Kahda | 25.0% | 199/795 | 34.1% | 245/719 | +9.1 |
| Baidoa | 10.5% | 50/476 | 15.1% | 1010/729 | +4.6 |
| Dinsoor | 5.8% | 29/497 | 9.0% | 41/456 | +3.2 |
| Daynille | - | - | 10.1% | 66/655 | - |
| **Combined** | 15.7% | 278/1,768 | 18.1% | 462/2,559 | +2.4 |

Measles vaccination coverage has also improved somewhat since Round 1 but remains worryingly low, with an overall coverage estimate, using recall and record cards combined, of only 42%. According to Sphere Standards (Child health standard 2.2.1:Childhood vaccine-preventable diseases) there is still a pressing need to launch a measles campaign as coverage remains well below the 90% threshold.

*Table 6: Measles Vaccination (MCV1) Coverage in Children aged 9-59 months*

| Area | Indicator | Round 1 | | Round 2 | | Change (% points) | 90% Coverage[1] |
|---|---|---|---|---|---|---|---|
| Kahda | Record card | 9.8% | 70 | 18.9% | 123 | | |
| | Recall | 41.6 % | 298 | 46.7% | 304 | | |
| | *Combined* | 51.3% | 368/717 | **65.6%** | 427/651 | +14.3 | NO |
| Baidoa | Record card | 3.2% | 13 | 6.0% | 36 | | |
| | Recall | 26.9% | 111 | 37.7% | 227 | | |
| | *Combined* | 30.0% | 124/413 | **43.7%** | 263/602 | +13.7 | NO |
| Dinsoor | Record card | 1.04% | 5 | 0.0% | 0 | | |
| | Recall | 20.4% | 98 | 25.7% | 96 | | |
| | *Combined* | 21.4% | 103/481 | **25.9%** | 96/374 | +4.5 | NO |
| Daynille | Record card | - | - | 0.5% | 3 | | |
| | Recall | - | - | 24.0% | 133 | | |
| | *Combined* | - | - | **24.5%** | 136/554 | - | NO |
| **Combined** | Record card | 5.5% | 88 | 7.4% | 162 | | |
| | Recall | 31.% | 507 | 34.8% | 760 | | |
| | *Combined* | 36.9% | 595/1,611 | **42.3%** | 922/2,181 | +5.4 | NO |

[1]Sphere standards indicate the need for a measles campaign if vaccination coverage is below 90%.
https://handbook.spherestandards.org/en/sphere/#ch009_004_001_001

Due to ongoing concerns about measles, and the high risk of child mortality associated with the disease, the two-week period prevalence of suspected measles was measured again in Round 2. For each child, questions were asked about the presence of fever, a rash, cough coryza, and conjunctivitis, during the last two weeks. A child was classified as having suspected measles if they had a fever *and* a rash, as well

as at least one out of the other 3 symptoms (cough, coryza, or conjunctivitis).[5] Results are presented in table 7 and show that in both Kahda and Baidoa there is an ongoing measles outbreak but that the period prevalence has reduced since Round 1.

*Table 7: Two Week Period Prevalence of Suspected Measles in children 6-59 mo.*

| Area | Round 1 | | Round 2 | | Change (% points) |
|---|---|---|---|---|---|
| Kahda | 9.8% | 78/800 | 4.3% | 31/726 | -5.5 |
| Baidoa | 6.9% | 33/478 | 4.6% | 34/734 | -2.3 |
| Dinsoor | 1.0% | 5/497 | 0.4% | 2/458 | -0.6 |
| Daynille | - | - | 4.0% | 26/656 | - |
| **Combined** | 6.5% | 116/1,775 | 3.6% | 93/2,574 | -2.9 |

The coverage of Oral Cholera Vaccine in children between 12 and 59 months was assessed in all four areas. Overall, 34% of children were reported to have received a dose of the vaccine with the highest coverage again reported in Khada.

*Table 8: Oral Cholera Vaccine (OCV) Coverage in Children aged 12-59 months*

| Area | Indicator | Round 1 | | Round 2 | | Change (% points) |
|---|---|---|---|---|---|---|
| Kahda | Record card | 7.6% | 50 | 8.1% | 48 | |
| | Recall | 26.5 % | 175 | 45.8% | 273 | |
| | Combined | 34.0% | 225/661 | 53.9% | 321/596 | +19.9 |
| Baidoa | Record card | 1.8% | 7 | 5.0% | 28 | |
| | Recall | 22.0% | 85 | 31.4% | 177 | |
| | Combined | 23.8% | 92/386 | 36.4% | 205/563 | +12.6 |
| Dinsoor | Record card | 0.7% | 3 | 0.0% | 0 | |
| | Recall | 20.4% | 91 | 26.7% | 94 | |
| | Combined | 21.1% | 94/446 | 26.7% | 94/352 | +5.6 |
| Daynille | Record card | - | - | 0.8% | 4 | |
| | Recall | - | - | 12.1% | 63 | |
| | Combined | - | - | 12.9% | 67/520 | - |
| **Combined** | Record card | 4.0% | 60 | 3.9% | 80 | |
| | Recall | 23.5% | 351 | 29.9% | 607 | |
| | Combined | 27.5% | 411/1,493 | 33.8% | 687/2,031 | +6.3 |

Acute Watery Diarrhoea was reported by 20% of children in Baidoa and 15% of children in Daynille, indicating a high morbidity. While there had been some, overall, reduction in prevalence since Round 1 there was an increase seen in Dinsoor.

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[5] Measles Vaccine-Preventable Diseases Surveillance Standards (2018) WHO
https://www.who.int/publications/m/item/vaccine-preventable-diseases-surveillance-standards-measles

*Table 9: Two Week Period Prevalence of AWD in children 0-59 mo.*

| Area | Round 1 | | Round 2 | | Change (% points) |
|---|---|---|---|---|---|
| Kahda | 21.8% | 173/795 | 7.8% | 56/719 | -14.0 |
| Baidoa | 26.9% | 128/476 | 20.0% | 146/729 | -6.9 |
| Dinsoor | 6.2% | 31/497 | 10.7% | 49/456 | +4.5 |
| Daynille | - | - | 15.0% | 98/655 | - |
| **Combined** | 18.8% | 332/1,768 | 13.6% | 349/2,559 | -5.2 |

## Mortality

Death rates were assessed using separate recall periods for households newly enrolled during Round 2 and these that had been previously interviewed in Round 1. A memorable date of July 9th 2022 was used for new households and the time since the previous interview was used for the others. As in Round 1, a verification exercise was performed to confirm the deaths reported in camps with higher than average death rates. Results from the combined 16 camps in the 4 areas indicate that both CDR and U5DR remain at 'emergency' levels, corresponding to an IPC Phase 4 classification. Most child deaths were reported to be due to measles or diarrhoea.

*Table 10: Crude Death Rate (CDR) and Under-five Death Rate (U5DR) in the Combined Camps*

| Indicator | Combined Areas | | |
|---|---|---|---|
| | Round 1 | Round 2 | Change |
| Persons under observation | 8,029 | 12,400 | |
| Average recall period (days) | 30.4 | 41.8 | |
| Person days of observation | 244,082 | 514,878 | |
| Total deaths reported | 23 | 32 | |
| Deaths in children <5 years | 17 | 24 | |
| *Crude Death Rate[2] (CDR) deaths/10,000/day* | 0.9 | 0.6 | -0.3 |
| *Under Five Death Rate[3] (U5DR) deaths/10,000/day* | 3.0 | 2.2 | -0.8 |

[1] The recall periods/days of exposure were set at a fixed one month (30.4 days) for each household in round 1 but were calculated for each household individually during round 2. In round 2 we used a memorable date (July 9th) to define the recall period for newly recruited households, and for household that had been recruited during round 1 we used the date of the first interview.

[2] Threshold levels for CDRound 2[,3] are: 1/10,000,day = Emergency; 2/10,000/day = Out of control

[3] Threshold levels for U5DR are: 2/10,000,day = Emergency; 4/10,000/day = Out of control

Source: Humanitarian Charter and Minimum Standards in Humanitarian Response; Essential health services standard 1 http://www.spherehandbook.org/en/essential-health-services-standard-1-prioritising-health-services/

and Interpreting and using mortality data in humanitarian emergencies, Checchi and Roberts (2005) http://odihpn.org/wp-content/uploads/2005/09/networkpaper052.pdf

## Conclusions

Data from Round 2 indicates that newly displaced populations in Mogadishu, Baidoa, and Diinsor are continuing to experience a very serious nutrition and health situation. Acute malnutrition in children 6-59 mo. remains at critical levels, measles and AWD infections persist, and crude and under-five death rates are at emergency levels. While there have been improvements in the delivery of vaccination and malnutrition treatment services, serious gaps persist. Intensified and sustained efforts are needed to ensure the humanitarian response meets Sphere standards and the risk factors for excess mortality are controlled and reduced.

The outlook for the next few months remains worrying with famine now projected for Baidoa and Burhakaba by the IPC.[6] It is therefore essential that the gaps in the current provision of public health services are addressed urgently.

## Recommendations

1. While there have been improvements in some programme performance indicators, an intensified humanitarian response is still required to deal with the very serious health and nutrition situation in IDP populations, and prevent the occurrence of the projected famine.
2. Urgent action to further scale up WASH services is required to ensure adequate access to potable water and reduce the widespread use of open field defecation.
3. Treatment of acute malnutrition should continue to be scaled up to ensure an adequate coverage of selective feeding programmes that meets Sphere standards and efforts continued to improve outreach. Assessment of programme coverage by the clusters should be done by area and triangulated against the coverage data reported here.
4. Measles vaccination coverage remains very low and action should be urgently taken to improve coverage, including the implementation of on-demand and campaign vaccination services. Given the low current coverage level, a measles campaign should be implemented and target people between 6 months and 15 years of age.
5. Vaccination services for measles and other diseases should be provided to IDP on arrival to mitigate the risks of further outbreaks occurring in the densely packed camp environment. Sphere standards require that at least 95 per cent of newcomers to a settlement aged between six months and 15 years are vaccinated.
6. Continuation and scaling up of NMS data collection should be implemented to enable real-time monitoring of the evolving crisis and the adequacy of the humanitarian response.

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[6] https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1155883/?iso3=SOM