

Nutrition and Mortality Monitoring in IDP Populations

Report on Round 1 - July 2022

DRAFT 1 Report issued: 15/08/2022



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



Executive Summary

As part of its famine prevention response, the BRCiS consortium is monitoring the health and nutrition situation in purposively selected IDP sites. 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.

Between July 18th and August 8th, data was collected from 1,484 households in 11 IDP sites in Khada in the Afgooye Corridor, Baidoa, and Diinsor. IDP had originated from villages in a variety of districts, mainly from Bay, Lower Shabelle and Bakool. 83% of the camp residents were from the Digil and Mirifle clan, with 11% coming from minority clans. The most widely spoken language/dialect was Maay and only 21% reported speaking the main Somali dialect (Mahatiri).

Water was sourced mainly from standpipes in Khada, tankers in Baidoa, and donkey cart vendors and springs in Diinsor. More than 40% of households in Baidoa and more than 70% in Diinsor reported inadequate access to drinking water. Access to pit latrines was also poor.

Child malnutrition was at *critical* levels with GAM by MUAC ranging from 21% in Khada to 28% in Baidoa. Enrolment in malnutrition treatment services did not meet Sphere standards with only 63% of SAM cases attending an OTP and 53% of MAM cases attending an OTP or SFP.

Only 16% of children aged 0-59 mo. possessed a health record card and measles vaccination coverage was found in only 37%, overall. The two week period prevalence of suspected measles was 6.5% with 1 in 10 children having been infected in Khada during the two weeks prior to the data collection interview. There is an urgent need to implement a vaccination campaign.

Vaccination with the oral cholera vaccine (OCV) was reported by 28% of children aged 12-59 mo. and the two week period prevalence of acute watery diarrhoea was 19%.

Mortality was found to be at *emergency* levels with a U5DR of 3 and a CDR of 1 deaths/10,000/day.

Data from July 2022 indicates that newly displaced populations are experiencing a very serious nutrition and health crisis. Acute malnutrition in children is at critical levels, there is a high level of 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 very serious health and nutrition situation in newly arrived IDP, and prevent deterioration into famine.

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Introduction

Somalia is currently experiencing a prolonged and devastating drought that has displaced more than 1 million people since January 2021¹. The situation is likely to worsen as the next rainy season is projected to be below average and is expected to push the number of people facing crisis hunger levels in Somalia to 7 million.

The Building Resilient Communities in Somalia consortium (BRCiS), led by the Norwegian Refugee Council, is currently implementing a humanitarian response to the ongoing drought in Somalia funded by FCDO's Internal Risk Facility (IRF). The project supports the vulnerable households to meet their basic needs and withstand the impacts of the drought.

As part of its response to the ongoing drought emergency and famine prevention, BRCiS has initiated the monitoring of nutrition and health monitoring within newly displaced populations. This sentinel site data collection aims to provide monthly updates on the situation of vulnerable groups in purposively selected locations. It is intended that the initiative will provide ongoing, near real-time, data on the evolution of the crisis, current and emerging threats to health and nutrition, and the coverage and adequacy of the humanitarian response. Round 1 data collection focussed on IDP sites in Banadir, Baidoa, and Dinsoor.

Methods

Sampling

The Nutrition and Mortality Monitoring System (NMS) approach² was used to collect data from a purposively selected sample of IDP sites/camps. The process used in the selection of sites is summarised in Figure 1. The CCCM cluster new arrival tracking (NAT) dashboard was first used to identify areas that were receiving large numbers of new IDP (arrived within the last 3 months). BRCiS partners then conducted field visits to identify individual sites/camps within these areas, confirm that they were sites with new arrivals, and collect the GPS coordinate for each of the sites. Once this mapping exercise was completed, the identified sites were mapped on Google Earth Pro and sites were then purposively selected by the e4c consultants for data collection. This selection was aimed at ensuring a good spatial distribution of sites within areas that were considered likely to include vulnerable new arrivals. The location of the selected areas, and the individual sites within these areas is shown in Figure 2.

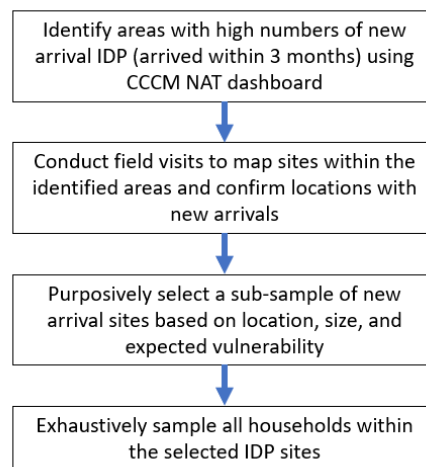
Team training

To ensure collection of high-quality data, team training was conducted remotely via video link. The e4c consultant conducted a 2-day training for community health workers (CHW), enumerators, and supervisors prior to the start of data collection. During this training, we gave an overview of different types of malnutrition, a virtual demonstration of MUAC measurements, the assessment of oedema, and the identification of suspected measles. We also piloted the data collection process and did some mock interviews with the CHWs and enumerators.

¹ One millionth person displaced by Somalia drought: <https://reliefweb.int/report/somalia/one-millionth-person-displaced-somalia-drought>

² 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.

Figure 1 - Summary of the data collection process



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 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 8th, 2022. IDP settlements in Khada, within the Afgooye Corridor, Baidoa, and Dinsoor were included. 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, due to concerns about the ongoing measles and cholera outbreaks.

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 the ONA server 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.

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. Maps of the data collection locations were prepared using the GPS

coordinates collected in ODK, which were visualised in Google Earth Pro.³ Maps presented in the report were prepared using Google My Maps.⁴

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 a recall period of one month (30.4 days). 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 more than 5 weeks before the interview, or deaths that had occurred in a location outside of the IDP camp after the household reported arriving in the camp.

Following this validation process it was noted that a surprisingly large number of deaths were still being reported from the IDP camps in Khada. 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 conduct over 2 days and resulted in the exclusion of a number of other reported deaths. The results from seven households were identified as coming from ‘dummy houses’ and all data from these households were excluded from the analysis reported in the report.

These findings demonstrated the importance of using multiple approaches to validate key indicators and the challenges of conducting data collection in the highly charged context of the Afgooye Corridor. Use of community members in data collection teams is essential but the conflicts of interest that may arise have to be acknowledged and strategies put in place to mitigate any impacts on data validity.

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 1,484 IDP households in 11 sites. The sampled households contained 7,879 individuals, including 1,234 mothers/caregivers and 1,825 children under-five.

The average time since arrival at the IDP site was 3.3 months, ranging from less than one month up to 60 months. Seventy-one % of households had arrived within the last 3 months, with the camps sampled in Kahda and Baidoa containing the highest proportion of new arrivals.

As shown in Figure 3, overall, the IDP had migrated mainly from the regions of Bay, Lower Shabelle, Bakool, and Middle Shabelle. The region of origin differed by location with camps in Mogadishu receiving arrivals from a range of regions (mainly from Lower Shabelle, Bay and Middle Shabelle), while the area of origin was more restricted to Bay for camps in Baidoa and Diinsor.

³ <https://www.google.com/earth/about/versions/>

⁴ <https://mymaps.google.com/>

Figure 2: Map of IDP site locations

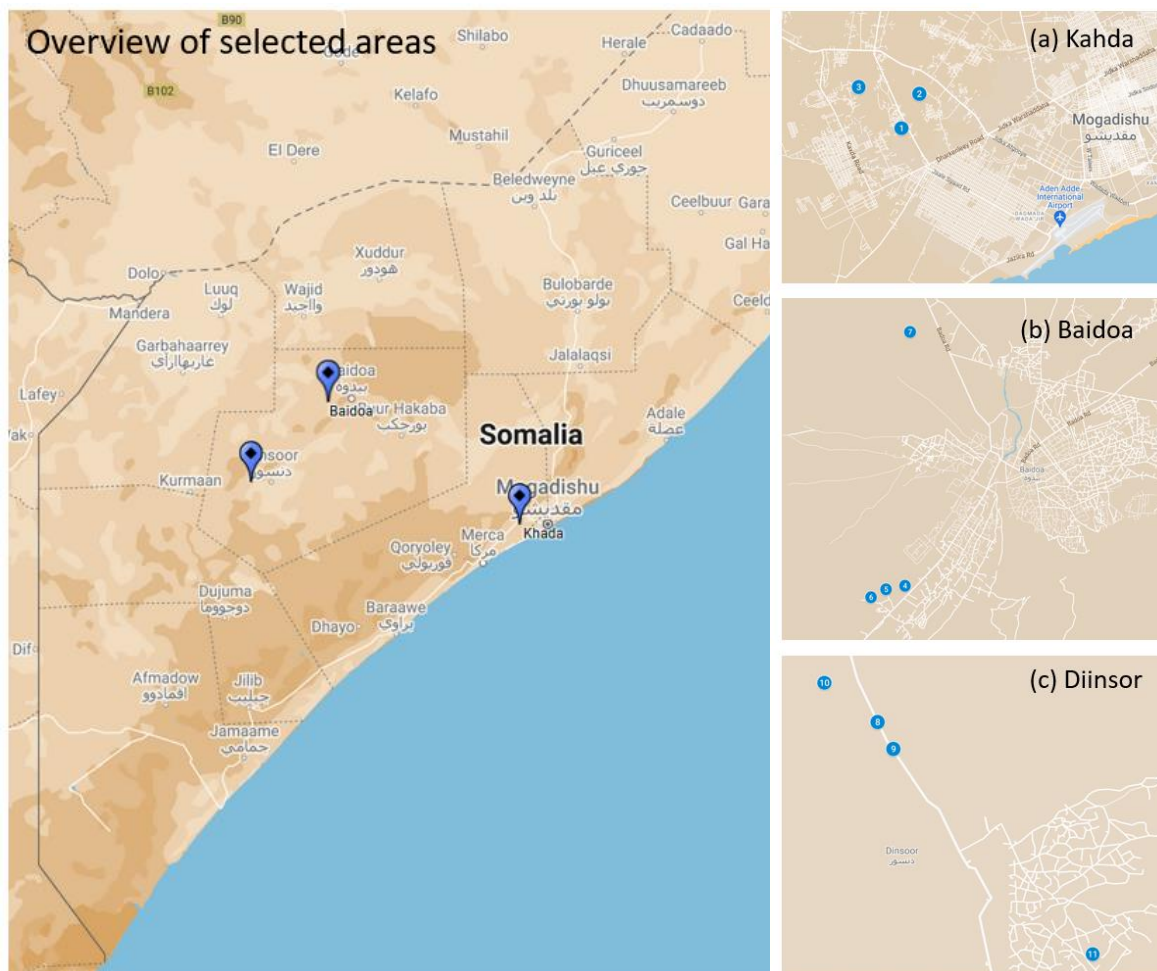


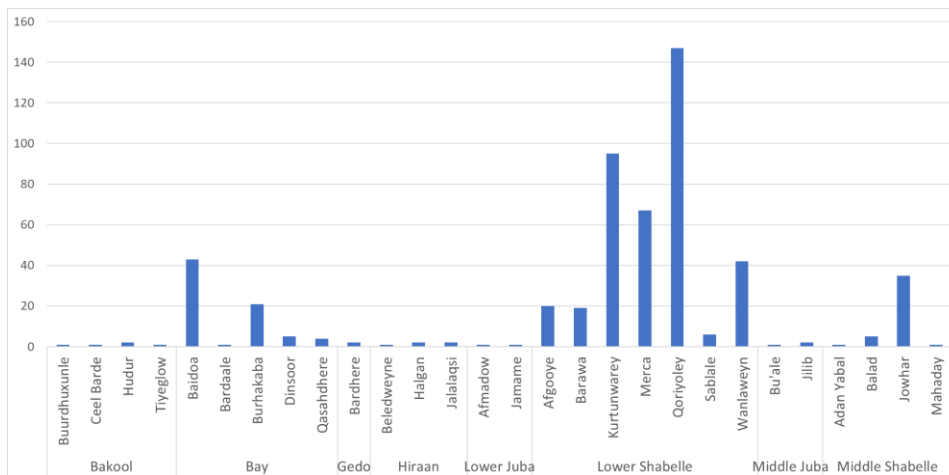
Table 1: Data collection summary

| Area | BRCiS Partner | IDP site | Data collection | Households | Round 1 | | |
|--------------------|----------------|---------------|-----------------|------------|------------|----------------|-----------------------------------|
| | | | | | Population | Household size | Months since arrival ¹ |
| Kahda Banadir | Action | Wabiyarow | 20/07 - 02/08 | 198 | 1,092 | 5.5 | 2.9 (1, 25) |
| | Against Hunger | Kuntuwareey | 20/07 - 02/08 | 241 | 1,310 | 5.4 | 3.0 (1, 24) |
| | | Canoole | 20/07 - 02/08 | 164 | 680 | 4.1 | 4.8 (1, 29) |
| <i>Combined</i> | | | | 596 | 3,049 | 5.1 | 3.5 (1, 29) |
| Baidoa Bay Region | GREDO | Bogey | 23/07 - 30/07 | 109 | 570 | 5.2 | 2.0 (0, 10) |
| | | Abag Dheere | 23/07 - 28/07 | 122 | 511 | 4.2 | 1.1 (0, 5) |
| | | Barbaare | 23/07 - 26/07 | 79 | 511 | 6.5 | 3.9 (0, 18) |
| | War Ajiin | 27/07 - 30/07 | 126 | 754 | 6.0 | 3.6 (0, 23) | |
| <i>Combined</i> | | | | 436 | 2,346 | 5.4 | 2.6 (0, 23) |
| Dinsoor Bay Region | GREDO | Biilale One | 18/07 - 30/07 | 119 | 669 | 5.6 | 6.2 (0, 10) |
| | | Biilale Two | 18/07 - 30/07 | 165 | 914 | 5.5 | 3.3 (0, 35) |
| | | Korkaamare | 18/07 - 30/07 | 95 | 460 | 4.8 | 3.1 (0, 10) |
| | Tunida | 24/07 - 30/07 | 73 | 441 | 6.0 | 1.4 (0, 4) | |
| <i>Combined</i> | | | | 452 | 2,484 | 5.5 | 3.8 (0, 35) |

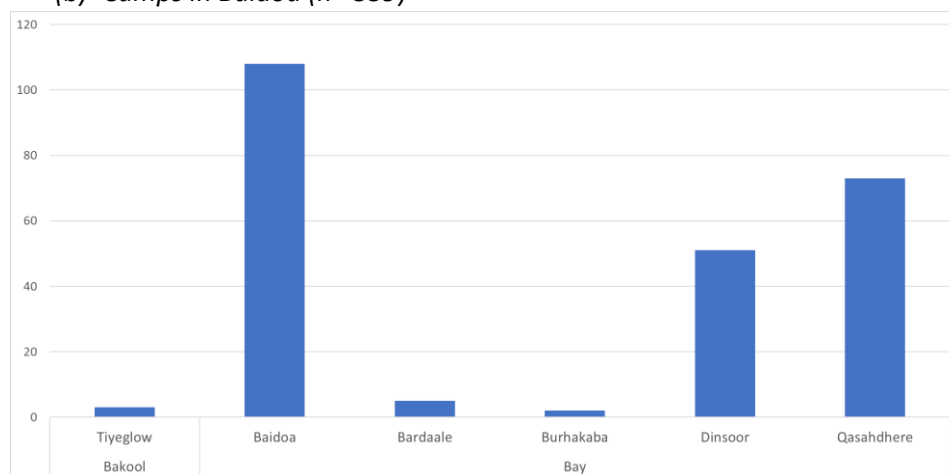
¹ mean and range

Figure 3 - Region & District of Origin of IDP Mothers/Caregivers

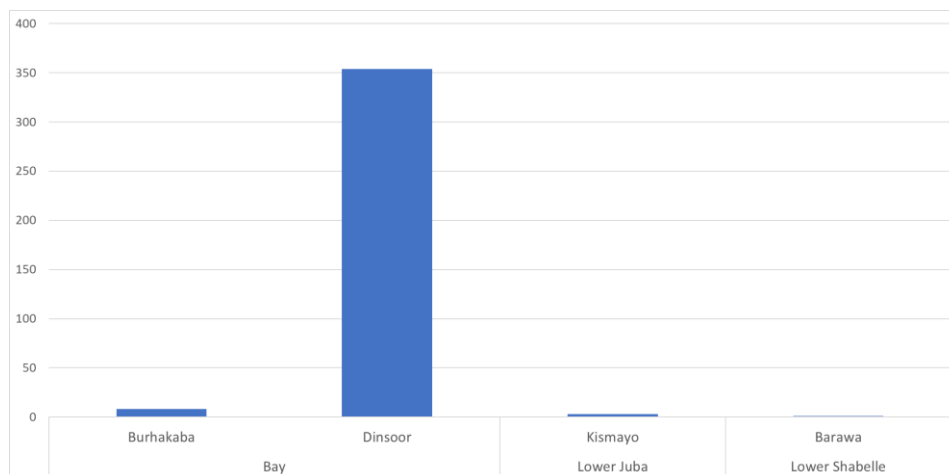
(a) Camps in Khada, Banadir (n= 529)



(b) Camps in Baidoa (n= 339)

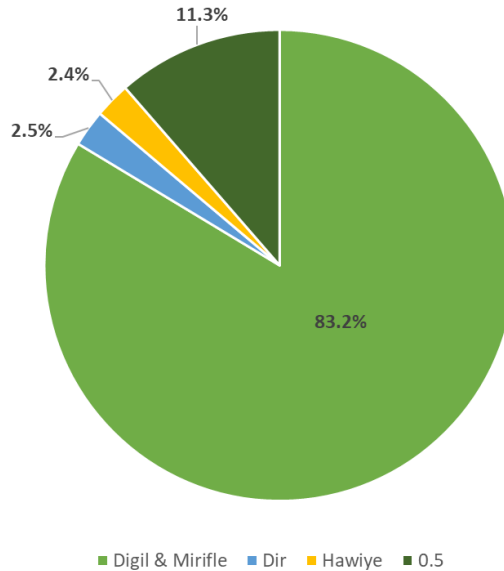


(c) Camps in Diinsor (n= 366)



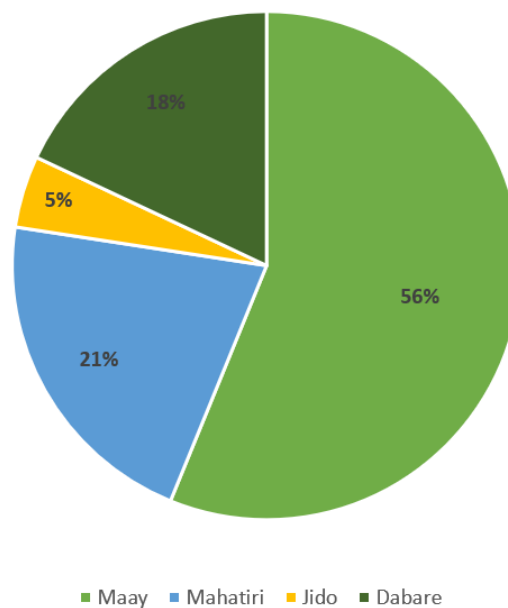
The clan affiliation of the IDP mothers/caregivers is shown in figure 4. The great majority of displaced people belong to the Digil and Mirifle (Rahanweyn) clans, with significant numbers also coming from the minority 0.5 clans.

Figure 4 - Clan of IDP Mothers/Caregivers (n=1,234)



The Figure below shows the languages spoken by the IDPs in these locations. The predominant languages vary by location, with, for example 100% of respondents speaking Maay in Baidoa but only 35% in Diinsor. Overall, only 21% reported that Mahatiri (Maxaa Tiri) or Northern Somali was their main language. While some IDP may be fluent in two or more Somali dialects this data shows that this is not the case for all. These findings reiterate the importance of trying to ensure that humanitarian staff include those with language skills in the dialects/languages they will encounter.

Figure 5 - Languages spoken by IDP Mothers/Caregivers (n=1,234)



WASH

The household WASH situation in IDP camps in Kahda, Baidoa, and Dinsoor is shown in table 2. The predominant water source varied by location with public taps most frequent in Kahda, tankers in Baidoa, and water vendors/donkey carts in Diinsor. Drinking water adequacy was an issue in households in all 3 locations, but was most marked in Diinsor, where 63% of households reported drinking water was sometimes or often inadequate and 5% reported that drinking water was always inadequate.

Defecation in the open field was reported by a substantial proportion of respondents in all 3 locations. 31% of households in Kahda, 32% in Baidoa, and 57% in Diinsor reported not using a pit latrine.

Table 2: Water and Sanitation Experience of Households Resident in IDP During Last 4 weeks¹

| Indicator ² | Round 1 | | | | | | |
|--------------------------------------------|-----------------------------|-----|-------------------|-----|--------------------|-----|--------------|
| | Kahda (n=596) | | Baidoa (n=337) | | Dinsoor (n=333) | | |
| Main source of drinking water ² | Public tap/standpipe | 501 | <i>84.1%</i> | 3 | 0.9% | 0 | 0.0% |
| | Handpumps/boreholes | 22 | 3.7% | 8 | 2.4% | 24 | 7.2% |
| | Well or spring | 45 | 7.6% | 39 | 11.6% | 93 | 27.9% |
| | Tankers | 1 | 0.2% | 280 | <i>83.1%</i> | 0 | 0.0% |
| | Vendor/Donkey cart | 27 | 4.5% | 4 | 1.2% | 167 | <i>50.2%</i> |
| | Bottled water | 0 | 0.0% | 0 | 0.0% | 2 | 0.6% |
| | Other | 0 | 0.0% | 3 | 0.9% | 47 | 14.1% |
| | Don't know / refused to say | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Frequency of inadequate drinking water | Never (0 times) | 5 | 0.8% | 0 | 0.0% | 4 | 1.2% |
| | Rarely (1–2 times) | 516 | <i>86.6%</i> | 195 | <i>57.9%</i> | 102 | <i>30.6%</i> |
| | Sometimes (3–10 times) | 61 | 10.2% | 139 | <i>41.2%</i> | 130 | <i>39.0%</i> |
| | Often (11-20 times) | 12 | 2.0% | 2 | 0.6% | 80 | <i>24.0%</i> |
| | Always (more than 20 times) | 2 | 0.3% | 1 | 0.3% | 17 | 5.1% |
| Defecation site ² | Pit latrine with slab | 150 | 25.2% | 226 | <i>67.1%</i> | 76 | <i>22.8%</i> |
| | Pit latrine without slab | 257 | <i>43.1%</i> | 5 | 1.5% | 68 | <i>20.4%</i> |
| | Bucket or bag | 92 | 15.4% | 0 | 0.0% | 1 | 0.3% |
| | In the open field | 97 | 16.3% | 103 | <i>30.6%</i> | 186 | <i>55.9%</i> |
| | Other | 0 | 0.0% | 3 | 0.9% | 0 | 0.0% |
| | Don't know / refused to say | 0 | 0.0% | 0 | 0.0% | 2 | 0.6% |

¹ Households that reported arriving to the IDP site within the last month are excluded from this analysis so that the results reported reflect the WASH experience *within* the IDP sites.

² Indicator categories with a prevalence of more than 20% are shown in italics.





Acute malnutrition

The GAM by MUAC prevalence measured in all 3 areas exceeded the threshold of 15% for IPC Phase 4/5 (Critical) Acute Malnutrition.⁵ The prevalence was highest in Baidoa where it reached 28%, indicating a very serious nutrition situation in newly arrived IDP that is consistent with levels that would be expected during a famine-like situation.

⁵ IPC Technical Manual Version 3.0, Evidence and Standards for Better Food Security and Nutrition Decisions (2019)

Table 3: Nutritional Status Using Mid-Upper Arm Circumference (MUAC) - Round 1

| Area | Sex | N (%) | Age (mo.) | Mean MUAC (cm) | Oedema | GAM (MUAC < 12.5 cm or oedema) | | MAM (MUAC < 12.5 cm & ≥ 11.5) | | SAM (MUAC < 11.5 cm or oedema) | |
|---------|----------|--------------|-----------|----------------|--------|--------------------------------|-------|-------------------------------|-------|--------------------------------|------|
| Kahda | Combined | 752 (100.0%) | 31.4 | 13.5 | 0 | 158 | 21.0% | 101 | 13.4% | 57 | 7.6% |
| | Male | 371 (49.3%) | 31.1 | 13.7 | 0 | 69 | 18.6% | 45 | 12.1% | 24 | 6.5% |
| | Female | 381 (50.7%) | 31.5 | 13.6 | 0 | 89 | 23.4% | 56 | 14.4% | 33 | 8.7% |
| Baidoa | Combined | 423 (100.0%) | 28.4 | 13.3 | 0 | 120 | 28.4% | 88 | 20.8% | 32 | 7.6% |
| | Male | 218 (51.5%) | 27.7 | 13.3 | 0 | 58 | 26.6% | 39 | 17.9% | 19 | 8.7% |
| | Female | 205 (48.5%) | 29.1 | 13.3 | 0 | 62 | 30.2% | 49 | 23.9% | 13 | 6.3% |
| Diinsor | Combined | 495 (100.0%) | 29.7 | 13.4 | 0 | 115 | 23.2% | 79 | 16.0% | 36 | 7.3% |
| | Male | 263 (53.1%) | 30.1 | 13.4 | 0 | 53 | 20.2% | 39 | 14.8% | 14 | 5.3% |
| | Female | 232 (46.9%) | 29.1 | 13.5 | 0 | 62 | 26.7% | 40 | 17.2% | 22 | 9.5% |

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) 

Coverage of nutrition treatment programs

Enrolment in Selective Feeding Programmes is described in table 4. Overall programme coverage was 53% for MAM and 63% for SAM, with Baidoa showing the lowest programme coverage. In no areas was the target coverage of 90% achieved 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

| Area | Moderate Acute Malnutrition (MUAC < 12.5 cm & ≥ 11.5) | | Severe Acute Malnutrition (MUAC < 11.5 cm or oedema) | |
|----------------|-------------------------------------------------------|---------------------------------------------|------------------------------------------------------|---------------------------------------------|
| | Percentage and number of cases in OTP or SFP | > 90% Coverage Target Achieved ¹ | Percentage and number of cases in OTP | > 90% Coverage Target Achieved ² |
| Khada | 74 % (75 / 101) | NO | 83 % (45 / 57) | NO |
| Baidoa | 39 % (34 / 88) | NO | 19 % (6 / 32) | NO |
| Diinsor | 41 % (32 / 79) | NO | 78 % (28 / 36) | NO |
| Total | 53 % (141 / 268) | NO | 63 % (79/ 125) | NO |

^{1,2} https://handbook.spherestandards.org/#ch007_004_001

Morbidity

Possession of a child health record card was assessed by including all types of vaccination cards, health passports, and other record cards. Coverage ranged from a low of 6% in Diinsor up to 25% in Kahda. The very low coverage of health record cards makes the delivery and monitoring of essential child health and nutrition services more challenging and less reliable.

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

| Area | Round 1 |
|-----------------|-----------|
| Kahda (n=795) | 199 25.0% |
| Baidoa (n=476) | 50 10.5% |
| Dinsoor (n=497) | 29 5.8% |
| Total (n=1,768) | 278 15.7% |

Measles vaccination coverage is worryingly low, with an overall coverage estimate, using recall and record cards combined, of 37%. Excess mortality from the ongoing measles outbreak is likely to result due to this very low coverage, especially given the high prevalence of acute malnutrition. According to Sphere Standards (Child health standard 2.2.1:Childhood vaccine-preventable diseases) a measles campaign should be initiated as coverage is well below the 90% threshold.

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

| Area | Indicator | Round 1 | 90% Coverage Achieved ¹ |
|-----------------|-----------------|------------|------------------------------------|
| Kahda (n=717) | Record card | 70 9.8% | |
| | Recall | 298 41.6 % | |
| | <i>Combined</i> | 368 51.3% | NO |
| Baidoa (n=413) | Record card | 13 3.2% | |
| | Recall | 111 26.9% | |
| | <i>Combined</i> | 124 30.0% | NO |
| Dinsoor (n=481) | Record card | 5 1.04% | |
| | Recall | 98 20.4% | |
| | <i>Combined</i> | 103 21.4% | NO |
| Total (n=1,611) | Record card | 88 5.5% | |
| | Recall | 507 31.1% | |
| | <i>Combined</i> | 595 36.9% | NO |

¹Sphere 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 concerns about the ongoing outbreak of measles, and the high risk of child mortality associated with the disease, the two-week period prevalence of suspected measles was measured. 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).⁶ Results are presented in table 7 and show that in both Kahda and Baidoa there is a significant, ongoing measles outbreak with a high period prevalence.

⁶ Measles Vaccine-Preventable Diseases Surveillance Standards (2018) WHO https://www.who.int/immunization/monitoring_surveillance/burden/vpd/WHO_SurveillanceVaccinePreventable_11_Measles_R1.pdf

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

| Area | Round 1 | |
|-----------------|---------|------|
| Kahda (n=800) | 78 | 9.8% |
| Baidoa (n=478) | 33 | 6.9% |
| Dinsoor (n=497) | 5 | 1.0% |
| Total (n=1,775) | 116 | 6.5% |

The coverage of Oral Cholera Vaccine in children between 12 and 59 months was assessed in all three areas. Overall, 28% of children were reported to have received a dose of the vaccine with the highest coverage reported in Khada. The low coverage combined with the poor WASH indicators reported above draw attention to the urgent need to reduce the risk of cholera and reduce the disease burden caused by water borne diseases by providing adequate access to water and sanitation services.

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

| Area | Indicator | Round 1 | |
|-----------------|-------------|---------|--------|
| Kahda (n=661) | Record card | 50 | 7.6% |
| | Recall | 175 | 26.5 % |
| | Combined | 225 | 34.0% |
| Baidoa (n=386) | Record card | 7 | 1.8% |
| | Recall | 85 | 22.0% |
| | Combined | 92 | 23.8% |
| Dinsoor (n=446) | Record card | 3 | 0.7% |
| | Recall | 91 | 20.4% |
| | Combined | 94 | 21.1% |
| Total (n=1,493) | Record card | 60 | 4.0% |
| | Recall | 351 | 23.5% |
| | Combined | 411 | 27.5% |

Acute Watery Diarrhoea was reported by 27% of children in Baidoa and 22% of children in Khada, indicating a high morbidity.



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

| Area | Round 1 | |
|-----------------|---------|-------|
| Kahda (n=795) | 173 | 21.8% |
| Baidoa (n=476) | 128 | 26.9% |
| Dinsoor (n=497) | 31 | 6.2% |
| Total (n=1,768) | 332 | 18.8% |

Mortality

Death rates were assessed using a one month recall period. Details of the verification exercise used to confirm the results in table below are provided in the methods. Results from the combined 11 camps in the 3 areas indicate that both CDR and U5DR are 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 | Round 1 | |
|-------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|
| | Combined Areas | |
| Persons under observation | 8,029 | |
| Recall period (days) | 30.4 | |
| Person days of observation | 244,082 | |
| Total deaths reported | 23 | |
| Deaths in children <5 years | 17 | |
| <i>Crude Death Rate² (CDR) deaths/10,000/day</i> | 0.94 |  |
| <i>Under Five Death Rate³ (U5DR) deaths/10,000/day</i> | 3.03 |  |

¹The recall periods/days of exposure were set at one month, i.e. 30.4 days

²Threshold levels for CDR^{2,3} are: 1/10,000/day = Emergency; 2/10,000/day = Out of control

³Threshold 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 1 indicates that newly displaced populations in Mogadishu, Baidoa, and Diinsor are experiencing a very serious nutrition and health situation. Acute malnutrition in children 6-59 mo. is at critical levels, there is a high level of 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. Current levels of WASH services are critically low and pose a serious risk to already vulnerable populations in crowded living conditions.

Combined with poor rainfall forecasts and the likely continuation of high food prices, the outlook for new IDP in the areas we assessed is very worrying. The serious gaps in the current provision of humanitarian services are also contributing to a likely deterioration in the situation.

During round 1 we focussed on the collection of data about demographics, areas of origin, clan and language, WASH, acute malnutrition, morbidity, mortality, and health and nutrition service provision. Due to time constraints we were not able to collect data on food security, dietary intake, or the receipt of humanitarian food assistance. Further information on these indicators is required to fully understand the humanitarian situation of these very vulnerable populations.

Recommendations

1. An intensified humanitarian response is required to deal with the very serious health and nutrition situation in newly arrived IDP, and prevent deterioration into famine.
2. Urgent action to scale up WASH services is required to ensure adequate access to potable water and reduce the use of open field defecation. This, together with a package of infection prevention and control (IPC), will help to reduce the risk of death from diarrhoeal diseases in general and help suppress the ongoing cholera outbreak.
3. Treatment of acute malnutrition should be scaled up to ensure an adequate coverage of selective feeding programmes that meets Sphere standards and efforts made to improve outreach and coverage.
4. Actions to tackle the ongoing outbreak of measles should be urgently prioritised so as to avoid further excess mortality, including the implementation of on-demand and campaign vaccination services. 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. Humanitarian agencies should strive to ensure that staff have the appropriate language skills to work with the affected populations in their areas of operation and that newly deployed staff have adequate experience and background knowledge on the context. Access to services must be ensured for all population groups according to need.
7. 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.