








## Situation Report

### Greater Horn of Africa Food Insecurity and Health - Grade 3 Emergency

Djibouti, Ethiopia, Somalia, South Sudan, Sudan, Kenya, Uganda

#### Key Figures

	<b>Est. total Population</b>	292 million (World Bank)
	<b>Acutely Food Insecure Population</b>	46 million (IPC 3+)
	<b>Number of Refugees and asylum seekers</b>	4.5 million (UNHCR)
	<b>Internally Displaced</b>	11.6 million (UNHCR)
	<b>Acutely Malnourished Children</b>	GAM: 11.9 million (IPC, UNICEF, OCHA)
	<b>Ongoing outbreaks (WHO)</b>	<ul style="list-style-type: none"> <li>• Cholera: 3 countries</li> <li>• Measles: 7 countries</li> <li>• Mpox: 1 country</li> <li>• Dengue: 3 countries</li> <li>• Malaria: 6 countries</li> <li>• Meningitis: 1 country</li> </ul>

☉ *The Greater Horn of Africa (GHOA) countries have continued to face serious drought situation due to five failed rainy seasons. Rainfall is projected to be below-average from March to May.*

☉ *More than 46 million people in IPC3+ are facing crisis level of food insecurity including 6.7 million IPC Phase 4, and 355 thousand in IPC phase 5.*

☉ *Over 11.6 million internally displaced persons and 4.5 million refugees and asylum seekers currently living in the GHOA.*

☉ *Nearly 2.3M new internally displaced people are reported mainly from Somalia, Ethiopia and Kenya due to drought.*

☉ *11.9 million children under five years old are likely to face acute malnutrition in 2023 and nearly 2.9 million children under five years old will require SAM treatment in 2023*

☉ *There has been a significant increase in admissions of SAM and MAM cases in refugee and IDP sites, especially in Ethiopia and Kenya, in comparison to previous years this period.*

☉ *Ongoing cholera outbreaks are reported in three countries (Ethiopia, Somalia and Kenya) resulting in an increase in morbidities and mortalities*

☉ *Ongoing measles outbreaks affect all the seven countries in the region, in response reactive vaccination campaigns are conducted.*

☉ *The Sudan Virus Ebola outbreak has been declared over in Uganda on 11 January 2023 since new case has been reported for 42 consecutive days*

☉ *WHO has continued to provide the necessary support in terms of health sector coordination, technical and financial support as well as the provision of drugs and supplies required to strengthen the surveillance and response measures.*

# 1 Thematic focus: Historical trends of diseases and malnutrition (January-December 2022)

The drought and food insecurity crisis in the Greater Horn of Africa (GHOA) was declared a Grade 3 emergency in May 2022. WHO established an incident management support team (IMST) with five strategic objectives to support the crisis response across all seven countries in the region. The IMST played an important role, enabling each member state to respond to this unprecedented crisis by strengthening coordination, health information management, surveillance and outbreak response, nutrition action, and essential health services in the most-affected areas. Nonetheless, projections for 2023 suggested that the situation is likely to get worse due to successive seasons of failed rains, along with ongoing conflicts and the global economic crisis<sup>1</sup>. The combination of these factors requires a coordinated and targeted response in the most vulnerable population groups. As the food insecurity crisis is a health crisis where malnutrition and disease outbreaks are of major concern, this situation report has a thematic focus on historical data and trends in order to provide an overview of the disease and malnutrition situation of the recent past, to identify priority areas, and to guide response measures across the GHOA region.

## 1.1 Malnutrition

Malnutrition plays a central role in a health and food insecurity crisis<sup>2</sup>. It is estimated that approximately 11.9 million children under the age of five are at risk of acute malnutrition in 2023 in the GHOA region with among them, almost 2.9 million are severely affected and will require admission for therapeutic feeding<sup>3</sup>. Across all the countries affected, Ethiopia (4.57 million) and Somalia (1.47 million) reported the highest number of malnourished children admitted to the nutrition programme in the region in 2022 (table 1)<sup>3</sup>.

In **Ethiopia**, a total of 673,657 severe acute malnutrition (SAM) children were admitted to nutrition programmes in 2022, representing a 31% increase over 2021<sup>4</sup>. The highest numbers of SAM cases were reported from the drought-affected regions of SNNP (40%), Somali (31%) and Oromia (22%). The Find and Teat campaign (UNICEF supported) revealed a very high proxy Global Acute Malnutrition (GAM) rate reported from these severely affected regions. In the Guji zone of the Oromia region, the GAM rate was 38%, and in the Kiblati and Fanti rasu zones of the Afar region, it was 42% and 30.1% respectively<sup>5</sup>.

In **Somalia**, over 459,616 children were admitted for SAM treatment in 2022 and more than one million children received Moderate Acute Malnutrition (MAM) treatment<sup>4</sup>. Additionally, 335,125 malnourished pregnant and lactating women (PLW) received nutritional support during the same period. The number is likely to continue to increase in 2023 as a recent projection (July 2023) suggested that nearly 1.8 million children under five are likely to be acutely malnourished, with 514,000 being severely malnourished<sup>6</sup>. In contrast to Ethiopia, the SAM admissions were stable and high over the years between 2019 and 2022 but in 2022 the effect of the current drought emergency is clearly visible with a 5-8 fold increase in cases compared to the years before (Figure 1B).

Country	SAM	SAM Trend	MAM	MAM Trend	GAM	GAM Trend
1 Djibouti	4036		4976		9012	
2 Ethiopia	709996		3866411		4576407	
3 Kenya	88232		178902		267134	
4 Somalia	459616		1013573		1473189	
5 South Sudan	236700		507300		744000	
6 Sudan	37425				37425	
7 Uganda	76243		81482		157725	

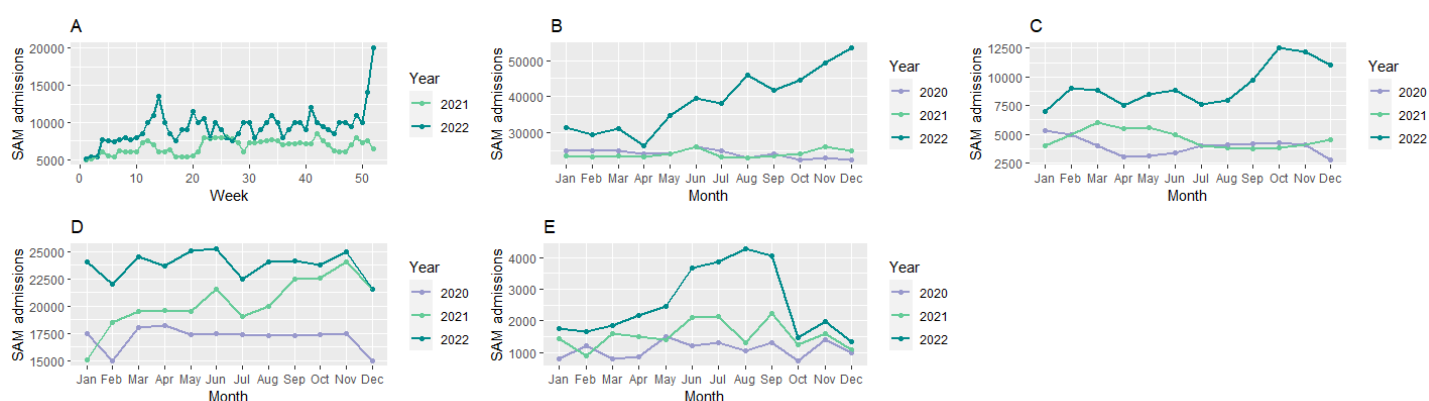
**Table 1: Reported malnourished under 5 years old children in the Greater Horn of Africa region in 2022.** (GHOA Ministries of Health malnutrition updates and January 2023 Food Security and Nutrition Working Group (FSN WG))

A total of 88,232 SAM children were admitted for the management of SAM in **Kenya**, which is the highest number in the last five years (Figure 1C). The highest figures were reported during the month of October in 2022<sup>4</sup>.

In **South Sudan**, as of December 2022 more than 790,000 children with malnutrition were admitted to nutrition programmes and more than 283,000 were suffering from SAM<sup>7</sup>. Seasonality is clearly visible for each year, and although the difference in trends over the past years do not vary as much as in Kenya or Somalia, there is a clear increase of about 20% in 2022 compared to previous years (Figure 1D).

There has been evidence of a decline in the number of children affected in **Uganda**, since the start of the harvest season from October to December 2022. Nevertheless, it is anticipated that the numbers will increase in the into 2023<sup>4</sup>. In 2022, more than 77,299 SAM and 81,842 MAM cases received therapeutic and targeted supplementary feeding programme (TSFP) support in Uganda. A large increase in SAM cases during the dry season is notable in 2022, followed by a rapid decline, most likely because of some rainfall at the end of the year, resulting in better food production (Figure 1E).

**Sudan** reported a total of 37,425 cases of SAM cases with medical complications admitted to the stabilization centre from January to December 2022<sup>8</sup>. The highest number of admissions was reported in September 2022 followed by a sharp decrease towards the end of the year.



**Figure 1:** Trend of SAM admission for under 5 years in the Greater Horn of Africa region in 2022. **A: Ethiopia, B: Somalia, C: Kenya, D: South Sudan, E: Uganda** (GHOA Ministries of Health malnutrition updates and January 2023 Food Security and Nutrition Working Group (FSNWG)).

## 1.2 Measles

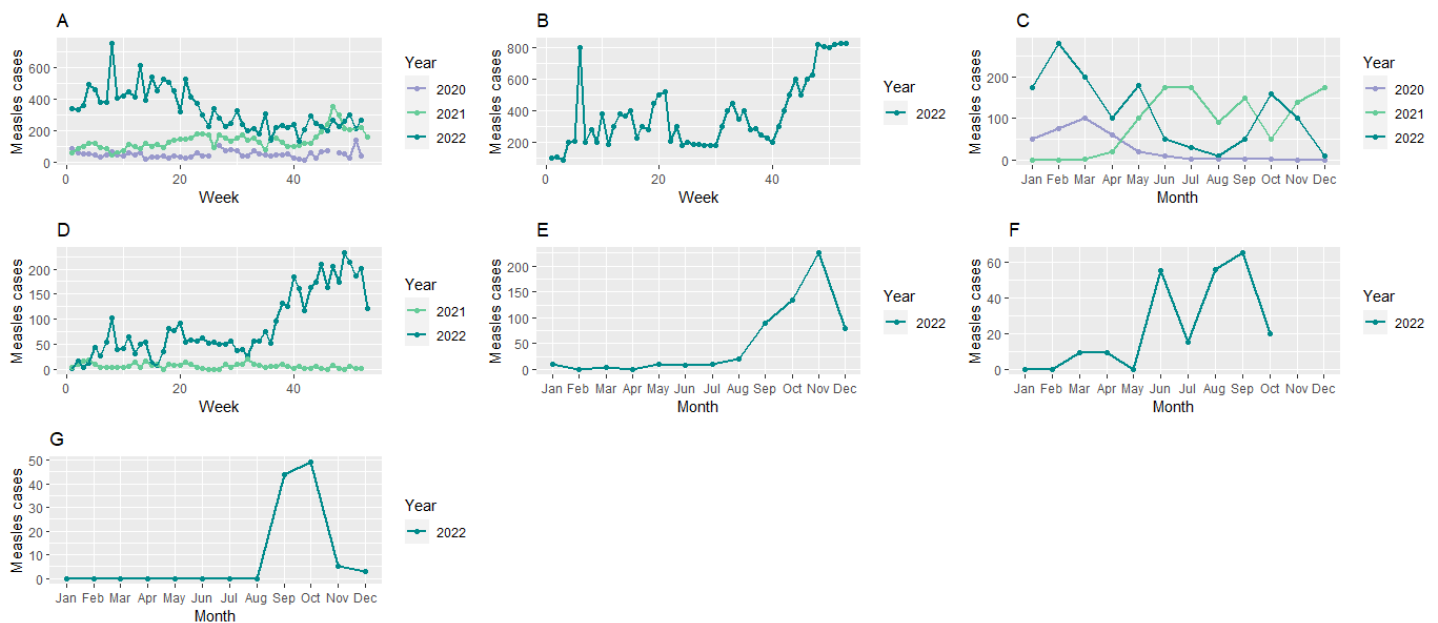
The ongoing food insecurity crisis accompanied by a low immunization coverage in the GHOA region has increased the risk of disease outbreaks of vaccine preventable diseases, especially measles. All the seven countries are currently managing various measles outbreaks, with the highest number of measles cases reported from Somalia, Ethiopia, Sudan and South Sudan. Seasonality in cases is evident, with patterns of dry periods coinciding with peaks in cases for most countries (Figure 2).

In **Somalia**, a total of 17,361 measles cases were reported in 2022 including 809 deaths (CFR:4.7%), with the highest number of cases being reported from Bay, Banadir, Bari, Mudug and the Lower Juba regions<sup>9</sup>. As of week 51, in 2022, a total of 629 samples (out of 1018) tested positive with a test positivity rate of 61.8%. Among the lab-confirmed cases, 77.5% were reported in under-five children. The reported number of cases is significantly higher than in the previous years when 7,494 and 2,596 cases were reported in 2021 and 2020 respectively<sup>9</sup> (Figure 2A).

A total of 19,249 suspected cases of measles and 143 deaths (CFR 0.74%) were reported from **Ethiopia** since January 2022 with the highest number of cases being reported from Oromia (6862), followed by Somali region (4336), Amhara (2,983), Addis Ababa (1894) and SNNP (1878) regions<sup>10</sup>. Nationwide measles supplementary immunization campaigns have been conducted in the affected areas of Amhara, Oromia, SNNPR, and Somali Regions since February 2022. WHO also supported the Ministry of Health (MoH) in strengthening Routine Immunization (RI) through outreach services and by providing training to frontline responders<sup>10</sup>. The observed suggested impact of these activities is noticeable throughout the year, but cases quickly peaked after again (Figure 2B). No historical data was found to compare with before 2022.

**Sudan** experienced multiple measles outbreaks in previous years. The last outbreak, from January 2018 through March 2019, recorded approximately 6,000 cases. In response to the outbreak, a national immunization campaign was carried out in March 2019. In 2022, a total of 3,310 suspected cases of fever and rash were reported, with 1,262 total measles cases, including 790 epi-linked and 472 lab-confirmed cases which is significantly higher than in the previous year<sup>11</sup>. The under-five age group was the most affected (65%) in the 2022 outbreak. In the years after 2019 very few cases were reported (Figure 2C), however in 2022, a total of 3,310 suspected cases of fever and rash were reported, with 1,262 total measles cases<sup>12</sup>.

A cumulative number of 5,111 measles cases, including 460 lab-confirmed cases and 54 deaths (CFR, 1.1%) were reported in **South Sudan** from January 2022 to January 2023, and all ten affected states reported measles cases in 2022 since an outbreak was declared by the MoH on 11 December 2022<sup>13</sup>. There has been a clear trend upwards (Figure 2D), whereas in 2021 very few cases in total were recorded. In response to the outbreak, a reactive campaign was conducted and a total of 858,274 children aged six months to 14 years were vaccinated in 19 counties. Additionally, a two-year measles response plan has been developed at national level to prepare and respond to such outbreaks in 2023.



**Figure 2: Trends of reported measles cases from countries in the GHOA region in 2022. A: Somalia, B: Ethiopia, C: Sudan, D: South Sudan, E: Kenya, F: Djibouti, G: Uganda.** (GHOA Ministries of Health DHIS2 data, measles bulletins, situation updates and surveillance reports up to December 2022)

The measles outbreak in **Kenya** affected six counties (Marsabit, Wajir, Garissa, Nairobi, Turkana and Mandera) and a total of 392 measles cases with 85 confirmed and two deaths (CFR 0.5%) have been reported with during the dry season (July to October), cases numbering up to as many as 200 a week (Figure 2E)<sup>14</sup>. The MoH with support from WHO and other partners conducted supplementary immunization campaigns in the affected counties. A 10-day measles vaccination campaign was rolled out from eight to 17 December 2022 in six counties, targeting 1.2 million children aged between nine to 59 months.

In **Djibouti**, as of January 2023, a total of 546 suspected measles cases were reported and the majority of the cases were from Djibouti-ville. The trend over 2022 has been erratic (Figure 2F), but with an overall higher incidence of measles than in previous years<sup>15</sup>. In response to the outbreak, WHO supported routine and supplementary vaccination campaigns and provided training to vaccinators and community workers to support the ongoing vaccination campaigns.

In **Uganda**, a measles outbreak was confirmed in two districts i.e. Lamwo and Kiryandongo (both refugee hosting districts with cases confined within the refugee settlements) displaying a similar trend as in Kenya<sup>16</sup>. A total of 114 cases in Lamwo and 148 cases in Kiryandong were registered with both outbreaks still active. In response to the outbreaks, reactive a vaccination campaign was conducted in both districts.

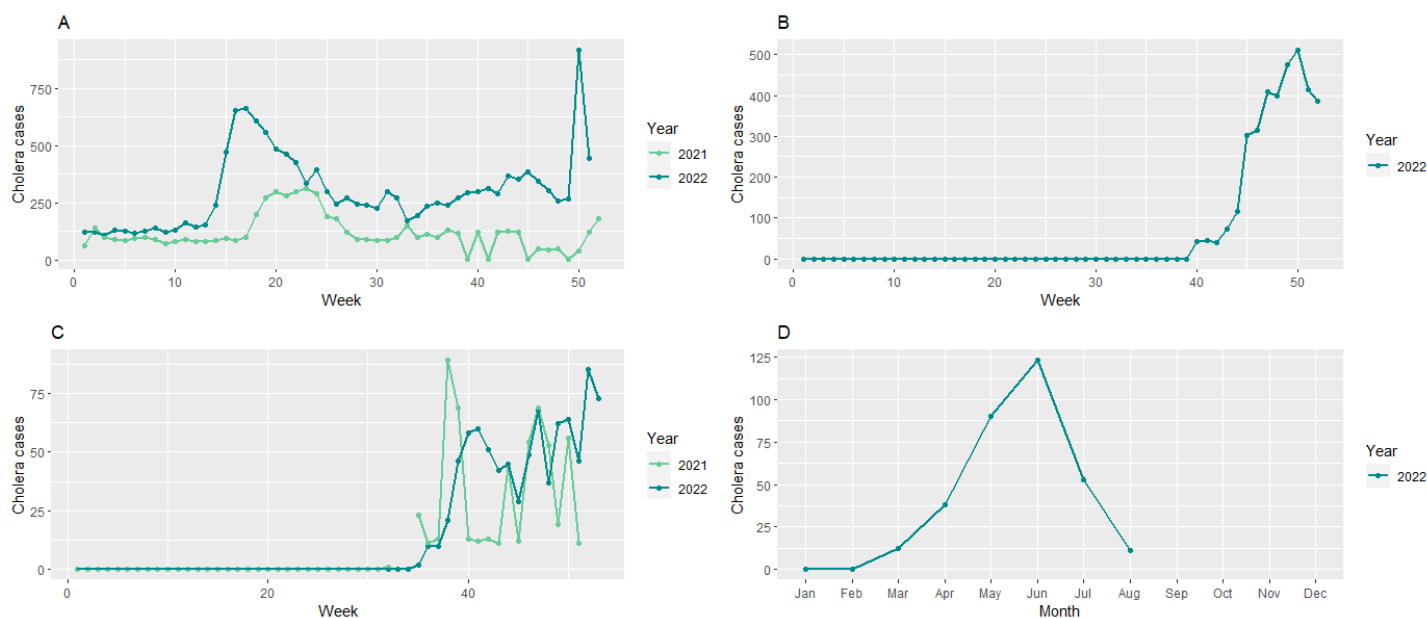
### 1.3 Cholera

Four countries (Somalia, Ethiopia, Kenya and South Sudan) reported outbreaks of cholera in 2022. **Somalia** reported the highest number, an increase from previous years. A total of 14,594 suspected cholera cases, including 893 confirmed cases and 88 deaths (CFR 0.6%), were reported from the country<sup>17</sup>. The majority (62.5%) of the reported cases were in children below the age of five. Most of the cases were reported from Banadir, Southwest, Hirshabelle and Jubaland. Daynile, Kahda and Dharkenley are the districts in Banadir with the highest attack rate among all the affected districts<sup>17</sup>. There is a clear seasonality in cholera cases noticeable in 2021 and 2022. And although the trend in 2022 was very similar to what was observed in 2021, the case load was an estimated four to five times higher in 2022 (Figure 3A)<sup>42 18</sup>. In response to the cholera outbreak, two rounds of oral cholera vaccination (OCV) campaigns were conducted in Somalia, with 897,086 (96% of the target) in the first round and 888,092 (99% of the target) people aged one year and above receiving the second round of vaccination.

In **Kenya**, an outbreak of cholera started in October 2022 and is still ongoing, with historically high caseloads recorded. The trend displays a peak in cases around November and December (Figure 3B), whereas in 2021 no cholera cases were reported<sup>19</sup>. A total of 4,431 cases, 163 of which were confirmed by culture, along with 83 deaths, (CFR 1.9 %) were reported. A total of 15 counties out of 47 were affected, with the highest cases reported from Garissa, Tana River, Nairobi, Mandera and Wajir counties<sup>14</sup>.

In **Ethiopia**, the cholera outbreak was confirmed on nine September 2022 and has affected 13 woredas in the Oromia (10 woredas) and Somali (three woredas) regions. A total of 858 cases including 39 confirmed and 28 deaths (CFR 2.7%) were reported in 2022<sup>10</sup>. A very similar trend was observed compared to neighbor Kenya, with multiple quickly spreading outbreaks after the failed rainy season in October. Compared to 2021, there was no outbreak in the beginning of the year, however a similar trend is evident at the end of both years (Figure 3C). WHO supported the MoH by establishing cholera treatment Centres (CTCs) in the most-affected areas. WHO and other health partners are also providing support to the MoH to strengthen disease surveillance, case management, WASH, and Risk Communication and Community Engagement (RCCE) activities<sup>10</sup>.

**South Sudan** reported suspected cholera cases since 19 March 2022 and a confirmed case from Bentiu Internally Displace Persons (IDP) camp was identified by the MoH on 14 April 2022<sup>20</sup>. There has been a peak in cholera cases confined to two locations early 2022. The trend showed a rapid downfall, and until the same period in 2023, no cases were reported. Trends suggest that between February and June cholera flairs up in South Sudan, usually starting from IDP sites (Figure 3D). During 2022, a total of 328 suspected cholera cases were reported, including one death (CFR: 0.3%). The majority of the cases were reported from Unity State and Ruweng administrative Area. From 30 October 2022 to December 2022, no new case of cholera was reported, amid an ongoing active case search and close monitoring of the situation<sup>20</sup>.



**Figure 3: Trends of reported cholera cases from countries in GHoA region in 2022. A: Somalia, B: Kenya, C: Ethiopia, D: South Sudan. (GHoA Ministries of Health DHIS2 data, cholera bulletins, situation updates and surveillance reports up to December 2022)**

### 1.4 Malaria

In **Ethiopia**, a total of 2,805,540 confirmed and clinical malaria cases were reported in 2022, representing a 100% increase over the previous year. The highest number of malaria cases was reported from Amhara, SNNPR, Oromia, SWEPRS, and Benishangul-Gumuz regions. The seasonal trends in both 2021 and 2022 are coinciding with rainy seasons. Nonetheless, the transmission and number of malaria cases increased much more rapidly at the beginning of the rainy seasons in 2022 with peaks nearly three times higher than the year before (Figure 4A)<sup>10</sup>.

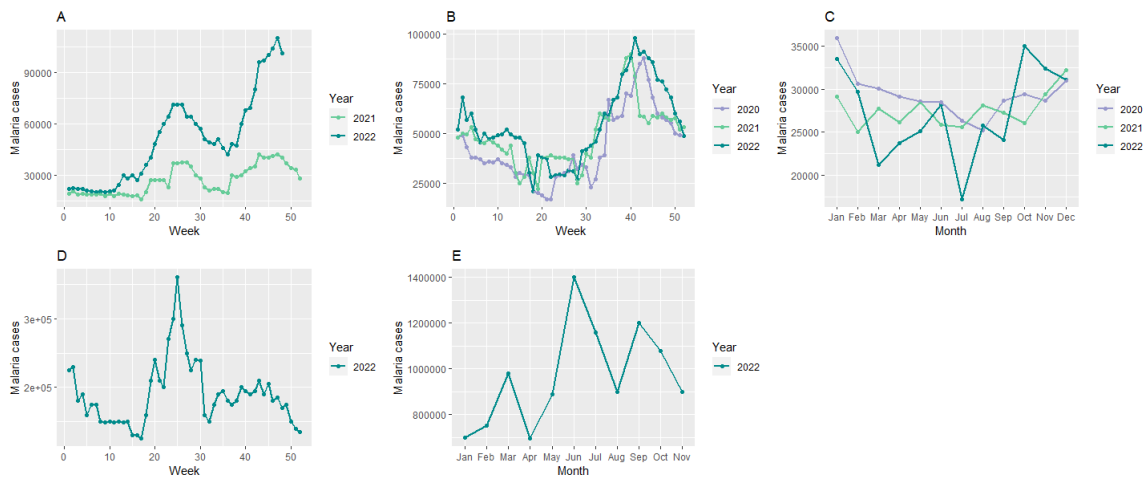
In **Sudan**, malaria continues to be the leading cause of morbidities, and according to the Federal Ministry of Health (FMoH), a total of 2,806,721 cases, including 269 associated deaths (CFR 0.009%) were reported from January to December 2022<sup>21</sup>. The highest number of malaria cases was reported in October 2022, with the epidemic threshold being surpassed in 11 states: Khartoum, Gezira, Blue Nile, Sinnar, Kassala, Gedarif, Northern state, West Kordofan, West Darfur, South Darfur and East Darfur. Unlike Ethiopia, compared to the previous years, 2021 and 2020 the trend in cases in Sudan does not show a significant difference (Figure 4B)<sup>21</sup>.

In **Somalia**, as of December 2022, a total of 11,226 confirmed malaria cases were reported and the highest number was reported in October (Figure 4C)<sup>18</sup>.

The trend of cases of malaria in **Kenya** shows a typical peak just after the long rainy season in June 2022. Nearly seven million cases were recorded across the country (Figure 4D)<sup>19</sup>.

In **Uganda**, between January and November 2022, a total of 10,624,527 malaria cases were reported, representing a decrease from the previous year (13,023,397 cases in 2021)<sup>22</sup>. The malaria burden was highest in the south-western and Eastern regions of the country.

In **South Sudan**, malaria remains a disease of public health significance and a major cause of morbidity and mortality, particularly among pregnant women and children under five. The 2021 World Malaria Report estimates that about 8,750 malaria cases are reported daily, with an estimated 20 people decessing of malaria every day in South Sudan<sup>23</sup>. Transmission is year-round and peaks between July and November. Plasmodium falciparum is the dominant species, accounting for 93.1 % of infections<sup>23</sup>. In the fourth quarter of 2022, a total of 987,355 cases were reported, including 336 deaths (CFR: 0.03). Recent flooding that affected 36 counties and Abyei administrative area across nine states, caused increased caseloads of malaria in the affected areas<sup>20</sup>.



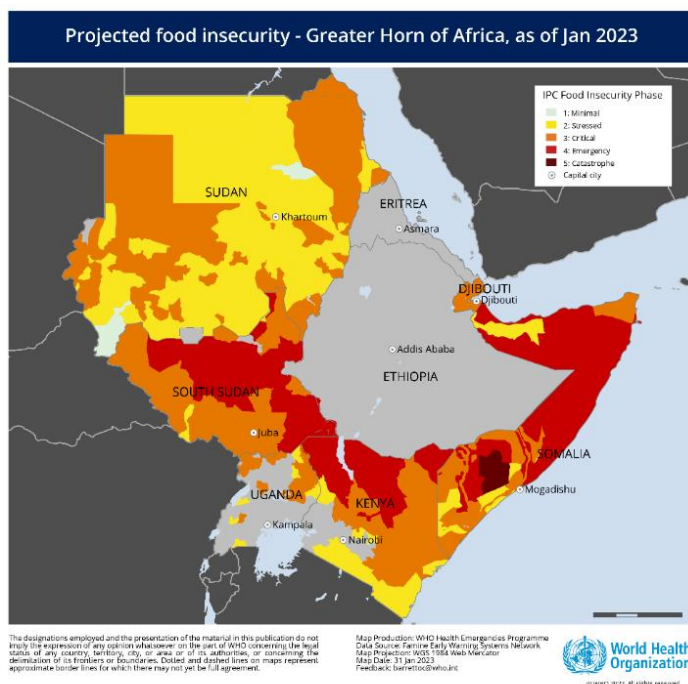
**Figure 4:** Trends of reported malaria cases in the GHoA region in 2022. A: Ethiopia, B: Sudan, C: Somalia, D: Kenya, E: Uganda (GHoA Ministries of Health DHIS2 data, malaria bulletins, situation updates and surveillance reports up to December 2022)

## 2 Public health risk and concerns

The main drivers of public health risks and emergencies in the GHoA region remain a combination of climate disasters, conflict and instability, natural disasters, high population movements (both IDPs and refugees), disrupted public health services due to economic crisis and limited capacity of health care, especially at the sub-national levels. These factors on one hand contribute to a higher need for health and access to health, and it hampers the capacity of the health system on the other, posing a dire health situation not only for vulnerable groups, but similarly to other parts of society.

### 2.1 Population in need of health services related to food insecurity.

A total of 292.7 million people live in the GHoA region and among them, an estimated 46 million people are estimated to face high levels of acute food insecurity or worse than the Integrated Food Insecurity Phase Classification (IPC) level 3<sup>24</sup>. Approximately 11.9 million children under five years old will likely face acute malnutrition and among them, nearly 2.9 million children will require SAM treatment in 2023<sup>25</sup>.



**Figure 5:** Predicted food insecurity levels based on projection periods.<sup>3</sup>

As of January 2023, more than 20 million people need humanitarian assistance because of the ongoing drought, conflict and other humanitarian crises in **Ethiopia**<sup>1</sup>. This is an increase from the 8.1 million people in need targeted at the beginning of March 2022 - Somali, Afar, Oromia, SNNP, and Southwest regions are the most affected. The deteriorating situation continues to contribute to the morbidity and mortality burden following the increase in disease outbreaks (cholera, malaria, measles, meningitis). Malnutrition is also on the rise in several locations across the country requiring higher needs for treatment services. One out of five SAM admissions reported medical complications in Ethiopia by January 2023. Over 2.7 million people were displaced in search of food, water, and pasture which further disrupts the continuity of essential health and nutrition services in the drought-affected regions<sup>26</sup>. According to recent forecasts, there is a risk of further deterioration in the coming months due to another failed rainy season, further driving humanitarian needs in 2023 (Figure 5)<sup>27</sup>.

The latest projections suggest a likely unprecedented deterioration in **Kenya's** food security situation, with over 5.4 million people set to experience acute food insecurity between March and June 2023 (Figure 5)<sup>3</sup>. The situation is even more likely to deepen in successive months. The short rainy season improved the IPC situation in some counties, and this was mainly due to the direct impact of the rains on livelihoods in these areas. However, the improvement is expected to be limited and further deterioration is projected between March and June 2023<sup>28</sup>.

In **Sudan**, the food insecurity situation persists due to the significant increases in the prices of food and other commodities, coupled with a reduced harvest and continued conflict. Over 141 (75%) of the localities in the country were identified as high-risk in the multi-hazard plan<sup>29</sup>. Projections show that the situation will persist into February 2023, with almost eight million people likely to be in IPC level 3 or worse. This includes 6.2 million people in IPC 3 and 1.5 million people in phase IPC 4<sup>3</sup>. The states with the highest caseload of IPC 3 are Khartoum, Al Jazirah, South Darfur, West Darfur and North Darfur while the highest caseload for IPC 4 is in West Darfur, Kassala, White Nile, Gedaref and Blue Nile (Figure 5)<sup>30</sup>. Moreover, the country is currently battling with multiple outbreaks of epidemic-prone diseases like monkey pox, dengue fever, hepatitis E, measles, malaria and COVID-19. On 17 December 2022, the government declared an outbreak of vaccine derived polio virus (cVDPV-2) after one confirmed case identified from West Darfur state on 16 December 2022. WHO approved the release of 10.3 million doses of mOPV2 for conducting the first round of outbreak response campaign between 18 and 21 March 2023<sup>11</sup>.

In **South Sudan**, the latest IPC classification, released on three November 2022, that about two-thirds of the South Sudanese population (7.76 million people) are likely to face acute food insecurity during the April-July 2023 lean season – the highest level ever. It is also anticipated that around 1.4 million children will be malnourished during that period. Humanitarian needs remained high with an estimated 9.1 million people (excluding refugees) projected to be need of humanitarian assistance and protection services<sup>31</sup>.

In **Somalia**, the latest analysis suggested that between January to March 2023, nearly five million people will experience high levels of acute food insecurity, classified as IPC Phase 3 or above, including close to 1.4 million people in IPC Phase 4 and 96,000 people in IPC Phase 5<sup>32</sup>. IPC phase 4 levels of acute malnutrition persist in most parts of the country (Figure 5). Between January and December 2023, it is estimated that approximately 1.8 million children will be acutely malnourished, including nearly 478,000 children who are likely to be severely malnourished<sup>32</sup>.

## 2.2 IDP/ Refugees

A total of 4.5 million refugees, and 11.6 million IDPs reside in the seven countries as of 31 January 2023<sup>33</sup>. The ongoing drought, conflict and flooding continued to result in the displacement of people within the countries. High numbers of displacement due to drought have been reported from Ethiopia, Somalia and Kenya. During 2022, over 230,000 new refugees sought protection in the GHoA region, including 93,000 new arrivals in the drought affected regions of Ethiopia, Kenya and Somalia. Out of the total 4.5 million refugees and asylum seekers, 2.2 million are south Sudanese refugees residing in neighbouring countries<sup>33</sup>.

In **Djibouti**, more than 37,000 refugees and 6,000 IDPs are living in the country<sup>1</sup>.



In **Ethiopia**, approximately 884,000 refugees and asylum seekers and, 2.7 million IDPs had been registered as of 31 January 2023<sup>33</sup>.

In **Somalia**, nearly three million people have been internally displaced due to the ongoing drought and conflicts in the country<sup>34</sup>.

By the end of January 2023, **South Sudan** hosts approximately 311,000 refugees and 2.2 million IDPs<sup>33</sup>.

In **Sudan**, there are currently 3.7 million IDPs, 1.1 million refugees and more than 2,000 returnees. The highest number of IDPs are found in East, Central, West, North and South Darfur states while highest number of refugees are in Khartoum and White Nile states. Moreover, Uganda and Kenya are hosting a total of 1.5 million and 577,000 refugees coming from the neighbouring countries due to conflict and drought situation respectively.

The food insecurity and nutrition situation in the refugee and IDP sites is deteriorating further due to the impacts of ongoing drought, economic crisis, disease outbreaks, lack of access to healthcare, and limited water, sanitation and hygiene conditions. Recent surveys conducted in 2022 by UNHCR across refugee sites in Kenya and Ethiopia showed an upward trend in new admissions of acute malnutrition (both for SAM and MAM) in children under the age of five, with the global acute malnutrition (GAM) rate was above the emergency threshold (15%).

### 3 Disease surveillance and health information

#### 3.1 Epidemiology overview

The GHOA region continues to experience disease outbreaks, resulting in preventable morbidity and mortality. A combination of poverty, ongoing drought, deteriorated health-seeking behaviours, low immunization coverage, displacement and ongoing conflicts are considered to be the main contributing factors. As of the reporting period, all seven countries are experiencing measles outbreaks and three of them are also dealing with cholera (Ethiopia, Kenya and Somalia). Measles remains one of the leading causes of death among young children in the region. High levels of malnutrition and a lack of adequate healthcare can result in increased deaths from measles.

In **Ethiopia**, the measles outbreak affected 24 woredas of seven regions and in January 2023, a total of 843 measles cases, including 23 deaths (CFR 2.7%) were reported. Currently, the measles outbreak is active in 12 woredas of Somali and four woredas of the Oromia region<sup>35</sup>.

The MoH in **South Sudan** declared an outbreak of measles on 10 December 2022 at the national level after at least 22 counties had confirmed the outbreak since the beginning of the year. As of January 2022 to January 2023, a total of 3,868 measles cases and 44 deaths (CFR: 1.13%) have been reported from 23 counties of 10 states in South Sudan<sup>36</sup>.

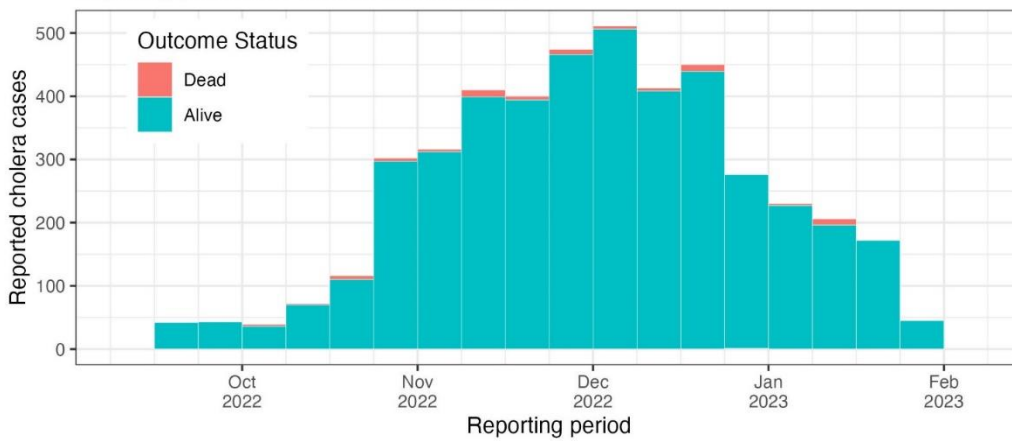
In **Somalia**, from January 2022 to reporting period, a total of 17,919 measles cases (809 confirmed) had been reported, 558 of them in January 2023<sup>37</sup>.

In **Sudan**, 54 new suspected Measles cases (nine confirmed) were reported from Kassala state in January 2023. The country is planning to conduct three rounds of measles catch-up campaign campaigns between Apr-June 2023 before introduction of MR vaccine in July 2023<sup>38</sup>.

The cholera outbreak in **Kenya** was classified as a Grade 2 emergency on 27 January 2023 and as of 30 January 2023, a total of 4,391 cases with 82 deaths (CFR 1.9%) had been reported (Figure 6). The outbreak affected one of the country and the region's biggest refugee camps, Dadaab<sup>39</sup>.

### Weekly trend of reported Cholera cases in Kenya

Reporting period: 05 Oct 2022 to 31 Jan 2023

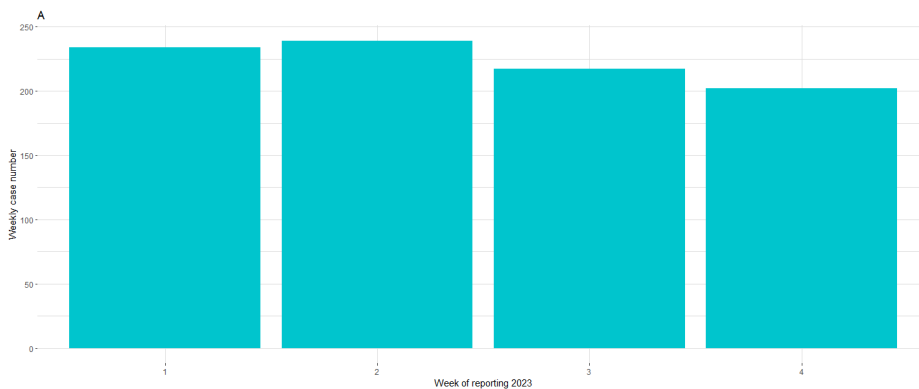


**Figure 6: Weekly epidemiological graph of reported cholera cases and deaths from Kenya (as of 31 January 2023).**<sup>39</sup>

In **Ethiopia**, a cholera outbreak was ongoing in 10 woredas, eight of them in Oromia and remaining two in Somali region. As of 30 January 2023, a total of 1,055 suspected cholera cases, including 28 deaths (CFR- 2.7%) were reported<sup>40</sup>.

In **Somalia**, a total of 892 cases of suspected cholera and one death were reported from 25 drought-affected districts. The number of cases reported in January 2023 is still higher in comparison with the same period over the last two years. (Figure 7, 4C). Up to 48% of the reported cases were children under the age of five, and 46% were severe cases in need of immediate treatment. The cholera outbreak was active in the southern state of Jubaland, where poor sanitary conditions and flash flooding events were reported. Cases have mainly been in districts not targeted by a recent OCV campaign, Afmadow and Belet-Hawa<sup>17</sup>.

The outbreak of Sudan Ebola virus (SUDV) in **Uganda** was declared over on 11 January 2023 as there were no new case reported in the preceding last 42 days. But surveillance is ongoing for immediate alert investigation and response<sup>41</sup>. However, there has been a measles outbreak in Palabek refugee settlement in Lamwo district with 107 cases reported as of 15 January 2023<sup>16</sup>.



**Figure 7: Weekly trend of reported AWD/Cholera cases from Somalia January 2023.**<sup>42,37</sup>

**Sudan** is currently dealing with outbreaks of measles, dengue, hepatitis E, Mpox and malaria. As of 31 January 2023, a total of 5,358 suspected cases and 844 confirmed cases of dengue fever were reported<sup>38</sup>. Out of the total number of cases, 36 deaths (CFR 0.7%) were reported from five states. Across the GHoA region, the first confirmed case of mpox was declared in Sudan on 31 July 2022 from West Darfur State and a total of 274 suspected and 18 confirmed mpox cases, including one death (CFR 5.5%), were reported as of January 2023<sup>38</sup>. Moreover, 2,851 hepatitis E suspected cases including 24 deaths (CFR 0.84%), were reported as of end of January 2023. Among vector-borne diseases, both malaria and dengue are prevalent in the country.

For malaria, a total of 2,974,295 cases including 278 deaths (CFR 0.009%) were reported between January 2022 and January 2023. The invasion of new vector species (*Ae. Albopictus* and *An. Stephensi*) is contributing to the increased number of malaria and arboviral diseases infections<sup>38</sup>.

In **Ethiopia**, during the first three weeks of January 2023, a total of 19,252 malaria cases were reported from the drought-affected regions, which is similar to the same period in the past two years (Figure 3D)<sup>43</sup>. Out of 19,252 reported cases, about 49%, 18%, and 15% were reported from SNNP, Afar, and Oromia regions, respectively. Additionally, 622 suspected meningitis cases including eight deaths were reported as of week 3, 2023. The cumulative number of suspected meningitis cases reported since 2022 is 7,870, including 78 deaths (CFR 0.94%). The highest number of cases was reported from Oromia (3,214), SNNPR (1,215), and Amhara (1,087) regions<sup>43</sup>.

## 4 Health service availability, utilization and any disruptions

The ongoing drought and conflicts in different parts of the GHoA is seriously affecting the health service delivery system. There has been report that health facilities are either being closed or providing limited services to the community.

### 4.1 Vaccination campaigns

Several vaccination campaigns have been conducted across the region in response to ongoing disease outbreaks. In **Somalia** more than 78,000 children under the age of five were vaccinated against measles in the Kahda and Daynile districts of Banadir in January 2023<sup>44</sup>. As a result of the vaccination campaign conducted by outreach teams deployed by WHO in the drought affected districts, the number of measles cases reported during the first week of January 2023 decreased by 35%<sup>9</sup>. Following an increase of cholera cases in the last months of 2022, WHO increased the supply of cholera kits while support teams were also deployed in the affected areas. Additionally, WHO is working to strengthen cross-border coordination and sharing of information. A total of 905,229 (90% of the target) people living in IDP camps received a single dose of the OCV drought-affected district<sup>45</sup>. Of the total 905,229 people vaccinated, 454,962 (50.2%) were over the age of 15 years followed by 300,712 (33.2%) from 5 to 15 years, with 149,555 (16.5%) in the 1-to-4-year age range<sup>45</sup>.

In **Ethiopia**, an OCV campaign was conducted in two cholera-affected woredas of Bale Zone (Goro and Berbere Woreda) Oromia region. A cumulative total of 76,226 (95.5%) people out of a target population of 82,135 were vaccinated<sup>40</sup>.

In **Sudan**, eight states (East Darfur, West Darfur, North Darfur, South Darfur, Central Darfur, AL Jazira, Sinner and Blue Nile) completed an integrated polio and yellow fever vaccination campaign by the end of January 2023 with an administrative coverage of 95%<sup>38</sup>. COVID-19 vaccination campaigns in **Sudan** were planned to be implemented in three rounds. The first round was completed between by October 2022 in all 18 states. The second round was completed in January 2023 in 16 out of 18 states. The third round is planned to start at the beginning of Mar 2023. As of end of January 2023, 36% of the target population is fully vaccinated (completed single and two doses' regimens), 19% is partially vaccinated (completed single dose of two doses regimen) while 55% of target population has received at least one dose (completed single and two doses' regimens and received single dose of two doses regimen<sup>46</sup>.

### 4.2. Attacks against healthcare

A total of 33 attacks on healthcare were reported from South Sudan, Sudan and Somalia from January 2022 to January 2023. Twenty-three of the attacks were reported from Sudan, resulting in seven deaths and four injuries. In South Sudan, nine attacks were reported, resulting in 11 deaths and 33 injuries. In Somalia, one attack was reported in March 2022 and cost the lives of 49 people, with three being injured. In January 2023, no attacks on healthcare facilities were reported from any of the seven countries<sup>47</sup>.

## 5 WHO Response

### 5.1. Coordination and leadership

In **Ethiopia**, WHO co-chaired various regional and zonal coordination meetings in the drought-affected regions. Subsequently, due to the ongoing measles outbreak affecting the Somali region, a regional public health emergency operation centre on the measles outbreak response was activated. Moreover, WHO co-chairs the coordination meetings on the measles outbreak response along with cholera coordination meetings at different levels.

WHO **Somalia** is currently working on strengthening coordination and collaboration between different partners and MoH on the drought response. There is an ongoing coordination mechanism for the inter-agency Integrated Response Framework in the hard-to-reach areas - WFP, UNICEF and WHO had two meetings in January 2023. Currently, 53 implementing partners (2 UN, 21 INGOs and 30 NNGOs) are working in 17 (out of 19) regions in 61 (out of 74) districts supported by the Health Cluster. An estimated five million people were reached by health cluster partners with essential healthcare services in 2022. A joint WHO and UNICEF meeting was organized to identify gaps and improve data flow, mapping, and capacity-building efforts aimed at improving the delivery of services in all stabilization centres across the country.

In **Uganda**, WHO has established three hubs in Moroto, Soroti and Gulu, covering the 19 affected districts in order to strengthen the country's response to the drought and food insecurity crisis. WHO also participated in a UN agencies' joint work planning meeting for 2023 hosted by UNICEF Gulu regional office. In collaboration with other partners, WHO launched the programme "No time to waste" in Napak district, aimed at the early prevention, detection and treatment of child wasting by promoting dietary diversity.

### 5.2. Prevention and control measures (including WASH)

WHO is conducting water quality monitoring in the drought-affected regions of **Ethiopia** through water testing from health facilities, water points at IDP sites and frequently used water sources in the affected communities. Working jointly with the zonal education bureau and health office, WHO conducted onsite WASH assessments at four schools in South Omo zone of SNNP region. In response to the ongoing cholera outbreak, an OCV campaign was conducted in IDP sites and kebeles of two affected woredas in the Oromia region, with a total of 76,226 (99.77%) people vaccinated in January 2023. Moreover, preparations are underway for vaccination campaigns in the affected woredas of Somali region<sup>40</sup>.

As part of the cholera outbreak response, a large OCV campaign was conducted in **Somalia** in January 2023. More than one million people in the drought affected districts were vaccinated with each person getting at least one dose<sup>45</sup>.

### 5.3 Nutrition Response

In **Somalia**, during the month of January 2023, WHO provided support to MoH in service delivery to 1,671,283 people. Over 560,000 outpatient consultations were reported by healthcare facilities supported by WHO during the reporting period. Additionally, a total of 25,286 children under-five were screened for malnutrition and out of these, 2,624 (10%) and 6,384 (25%) children were identified as having severe and moderate acute malnutrition respectively. WHO also deployed 58 outreach teams in the drought-affected districts to improve access to health care for the affected populations. Over 2,100 community health workers (CHWs) supported the community-based health and nutrition interventions in the country.

In **Uganda**, an expanded community screening campaign for acute malnutrition was conducted in six districts using a family-led Mid Upper Arm Circumference (MUAC) approach through orienting 480 people, including politicians. A total of 29,954 children were screened for malnutrition and the result indicated a proxy GAM of 6.3% against the acceptable threshold of <5%, and the proxy SAM showed 1.6% against the acceptable threshold of <2%. Additionally, WHO is also supporting the establishment and operationalization of Out-patient Therapeutic Centres (OTC) in six health facilities of Katakwi district. In relation to the nutrition situation in the country, the admission rate for SAM decreased sharply from 3,313 in September to 924 in December 2022 probably due to the harvesting season. However, the number of admissions slightly rose to 966 in January 2023 (Figure 1E).

#### 5.4. Essential health services delivery

In **Ethiopia**, in response to the cholera outbreak, WHO distributed 5.3 megatons Cholera Treatment Kits and 1.2 megatons of nutrition kits (SAM kits) to Liban and Dawa zones in the Somali Region. Additionally, 6.3 megatons of essential medicines and medical supplies (IEHK kits, paediatric SAM kits) were dispatched to affected zones in the Somali region to support measles case management and associated complications. Moreover, insecticide treated nets (ITNs) distribution was conducted in 60 woredas in the SNNP region as part of the preparedness and response to malaria outbreak.

During the month of January 2023, through community outreach services, more than 20,191 children received vaccines against hepatitis, whooping cough, tetanus, diphtheria, influenza, polio, and measles in **Somalia**. A total of 1,826 pregnant women received the second dose of the tetanus and diphtheria vaccine to prevent neonatal tetanus and diphtheria. WHO also supported the vitamin A and deworming campaign in Somalia during the reporting period with a total of 8,448 children for Vitamin A and 2,866 children received deworming tablets. A total of 3,537 pregnant women also received iron/folic acid tablets to prevent and treat maternal anaemia and prevent neonatal deformities. During the campaign, 511 children with severe respiratory infections were also referred for care to primary healthcare facilities.

In **Uganda**, WHO supported last-mile delivery support to four districts (Amuria, Kaberamaido, Katakwi, and Kapelebyong). Additionally, stock delivery and auditing was conducted, covering transport of Ready to Use therapeutic food (RUTF) from Soroti Regional Referral Hospital to Katakwi district hospital and an audit of six Health Centers.

#### 5.5. Training and technical expertise

WHO facilitated orientation training for 21 health care workers on preventive measures for measles at Karamara hospital in Somali region of **Ethiopia**. Moreover, RCCE activities were conducted to sensitise and improve community awareness on measles outbreaks. As part of the cholera outbreak response measures, key messages on cholera were disseminated to cholera affected woredas of the country. Additionally, in collaboration with the MoH, WHO supported the development of key draft messages (print, audio, TV & Radio spots) for cholera, malaria and COVID-19.

In **Uganda**, a total of 19,490 caregivers were trained on MUAC measurement during the expanded community screening program launch. WHO also provided technical guidance and onsite supportive supervision to the Lamwo and Kiryandongo districts which were affected by the Measles outbreak. WHO also mentored 12 health workers in six health facilities on stock management for nutrition supplies, data capture in integrated nutrition register (INR) and District Health Information System (DHIS) II reporting.

In **Somalia**, WHO facilitated training of trainers (TOT) for 52 health care workers on the newly established Integrated Disease Surveillance and Response (IDSR). The training was conducted from 29 January to two February 2023 with participants from the Federal MoH, member states Ministries of Health and key partners. The training aimed at strengthening disease surveillance system through rollout across the country. Moreover, micro plans were developed by the trainees to cascade the training to all districts of Somalia.

A total of 24 health care workers graduated from **Somalia** Field Epidemiology Training Program (SOM-FETP) in January 2023 and the three-month course is expected to strengthen early detection and response to public health emergencies. Since its inception, SOM-FETP has graduated a total of 71 frontline health workers across the country.

#### 5.6. Prevention and Response to Sexual Exploitation, Abuse and Harassment (PRSEAH)

In **Kenya**, two focal points are appointed at Country level and ToT for 20 MoH staff was conducted in December 2022 with the aim of strengthening the coordination and collaboration on matters regarding Preventing and Responding to Sexual Exploitation, Abuse and Harassment (PRSEAH). A PRSEAH expert from the WHO GHoA emergency team (IMST) was appointed to support the PRSEAH response in the cholera outbreak. 100% of the staff have been trained either online or in person on PRSEAH, however, coordination with the inter-agency country network is not fully in place yet.

In **Uganda**, six trained part time focal points are appointed to implement PRSEAH activities, and all staff have been trained on PRSEAH. Moreover, coordination with implementing partners is ongoing to ensure all needed measures are in place. A total of 110 people from the government received a training on PRSEAH and coordination with the country network is in place and ongoing. Awareness with the community is ongoing and reached 1823 people so far. Eleven community-based complaint mechanisms have been established so far. Standard operating procedures and a workplan have been developed. Additionally, information and educations materials have been developed, printed and distributed among offices and communities.

Since January 2023 there are one PRSEAH full time coordinator and 20 trained field focal points in **South Sudan**. The field focal points are cascading trainings to all workforce, especially for frontline staffs. Four awareness sessions have been conducted within the community and two risk assessments done in areas with high risk. Coordination and participation with the task force is ongoing at country and state level. Information, education and communication materials were developed, printed and distributed.

In **Ethiopia**, one full time PRSEAH coordinator plus 23 field focal points available in the country. In person training for the staff is ongoing with a 44% achieved so far. Awareness sessions within the communities are ongoing to achieve the highest number of beneficiaries in all affected areas. Twenty-two reporting mechanisms are active in the affected locations which includes hotlines number from government and police reporting systems. The coordination and participation in the task force has been active at country and regional level in January 2023. Referral pathways are available and updated in all affected areas.

In **Sudan**, two trained focal points are working on the implementation of PRSEAH activities. The training for staff is ongoing with most of the workforce attending virtually. In

There has been one PRSEAH full time coordinator and three focal points supporting the PRSEAH activities in **Somalia**. Most of the staffs were trained online and there is an active and strong coordination with the country level task force. Additionally, necessary workplans have been developed.

## 6 Gaps and challenges

There are security concerns in some parts of **Ethiopia**, especially in Wellega, Guji and West Guji zones of Oromia region where many people have limited access to healthcare services. In addition, a shortage of essential and emergency medical supplies along with therapeutic foods was reported in some woredas of Somali region. Moreover, due to access related issues, no assessment was conducted in the areas where IDPs reside, hence there is inadequate information pertaining to the health conditions of the community. It was also noted that partners' involvement in public health emergency response activities was limited in the Southwest region of the country. Shortages of OCV continued to be a major challenge in responding to the ongoing cholera outbreak in the country.

In **Kenya**, a lack of adequate resources impacted on the capacity of the critical response pillars to the ongoing drought and disease outbreaks. Additional support is needed for effective coordination between counties and responding health partners. Furthermore, the country faced inadequate infrastructure for cholera outbreak response and clinical management of the disease (lack of CTC and emergency operation centers in some counties) including infection prevention and diagnostic capacity. Weak surveillance systems at country borders made it difficult to monitor cross-border movements alongside the spread of diseases. Due to the shortage of vaccines in the country, only counties with the highest caseloads were targeted during for the vaccination campaign.

In **Uganda**, the community screening for admission into the acute malnutrition programme revealed a need to strengthen the functionality of outpatient therapeutic care at health facilities in locations with GAM levels exceeding the acceptable thresholds. There is a need for an additional supply of MUAC tapes for the early detection of malnutrition at the household level. Furthermore, insufficient funding for the drought response was another major challenge affecting response activities.

In **South Sudan**, limited funding to respond to numerous emergencies and needs, disruptive insecurity incidents and inaccessibility in conflict-affected counties and huge operational costs measured against available donor support were some of the major challenges.

In **Somalia**, a lack of funding to sustain ongoing community health and outreach activities, together with security constrains, were the main challenges faced in responding to the prolonged drought and ongoing disease outbreaks. Moreover, heavy rains in the southern part of the country have caused flash flooding which have displaced many, increasing the risk of water-borne diseases and malaria. The global shortage of OCVs is also affecting the response to the disease.

Reduced funding, civil unrest due to political instability, intercommunal violence, continuous industrial action by health workers, high staff turnover, attacks on healthcare facilities as well as the presence of multiple disease outbreaks have the major operational challenges affecting service delivery in **Sudan** in January 2023.

## 7 Funding status of WHO's Greater Horn of Africa food insecurity and health response

### Funding status



**Figure 8: Funding requirement in 2022 and 2023 for the Greater Horn of Africa food insecurity and health response**

## 8 Priority Actions, recommendations and next steps

There is a need for continuous support for the cholera outbreak response in Oromia and Somali regions in **Ethiopia**. More attention is needed in areas with IDP camps and woredas bordering with Somalia and Kenya especially in strengthening the preparedness and response activities. Furthermore, additional funds are required for preparedness and response measures including water quality monitoring activities. More support is also needed on WASH related activities especially in the cholera affected areas. Surveillance activities need to be strengthened for the early warning system, and alert/rumour investigations.

In **Kenya**, multilateral coordination of the drought and food insecurity response is the priority. WHO is currently working to strengthen the coordination mechanisms between different counties and an enhanced integrated surveillance system is needed at all levels. Because of the ongoing cholera outbreak in the country, WHO is strengthening cholera surveillance in the affected regions including the refugee camps. All the three countries affected by the cholera outbreak are seeing an increase in the number of cholera cases and a strong cross-border coordination mechanism is highly needed for timely control of the ongoing outbreak.

In **Uganda**, there is a need for collaborative support towards the training of health workers on the Integrated Management of Acute Malnutrition, and in Health Information System Data Management. Additionally, a performance review of the WHO response to the public health consequences of food insecurity and drought in the Karamoja region and adjoining districts is needed in order to evaluate the timeliness and impact of the adopted actions to date. WHO will disseminate findings of the Health and Nutrition Quality of Services assessment jointly conducted with MoH. Continuous on-site mentorship of health workers on the Integrated Management of Acute Malnutrition, along with Tuberculosis (TB) screening and management, updating the integrated nutrition register, and integrated supportive supervision visits are the main priority areas for the country office in a bid to improve treatment outcomes for cases of acute malnutrition.

In response to the ongoing cholera outbreak in **Somalia**, the country will continue to focus on strengthening coordination activities with UNICEF and MoH regarding health and WASH-related interventions. WHO will moreover continue supporting government teams through the provision of medicines and other supplies, as well as building the capacity of healthcare workers and epidemiological and coordination activities to control the outbreak. In addition, support will continue in areas affected by the ongoing drought and conflict through the deployment of outreach teams and community health workers.

## 9 Advocacy message

The GHOA region continues to experience acute food insecurity, and recent projections indicated a worsening of the situation over the next few months. Health is an essential component of the response during a food insecurity crisis and by virtue of its protracted nature, the health risk is being overlooked and the sector is already facing a funding deficit. Poor nutrition is both a cause and consequence of diseases, and inadequate nutrition is a major cause of death. On 21 January 2023, WHO launched a funding appeal for the GHOA in response to the ongoing crisis. The focus lied on coordination, surveillance and health information, outbreak response and control measures, essential nutrition, and health service actions. Ongoing efforts are underway to improve national capacities for a more rapid, effective, and resilient health system response.

WHO is continuously working to ensure response that interventions reach vulnerable population groups, including women, children under five as well as those living in hard-to-reach areas. Coupled with this is an urgent need for additional funding to provide the support needed. There is an urgent need to sustain and increase the multi-sectoral humanitarian response in order to reduce morbidity and mortality associated to the food insecurity crisis and the consequent multiple disease outbreaks.

## 10 Focal point/Contact

Incident Manager <a href="mailto:GHOA_Incident_Manager@who.int">GHOA_Incident_Manager@who.int</a>	Health Information Management Team <a href="mailto:ghoa_info@who.int">ghoa_info@who.int</a>
--	--

Further Information to be found on the Health and food insecurity website: [Drought and food insecurity in the greater Horn of Africa \(who.int\)](#)

## References

- <sup>1</sup>Outbreak and Crisis Response Appeal, Greater Horn of Africa. <https://www.who.int/emergencies/funding/outbreak-and-crisis-response-appeal/2023/2023-appeals/appeal-horn-of-africa>
- <sup>2</sup>Salama et al. (2001) Malnutrition, Measles, Mortality, and the Humanitarian Response During a Famine in Ethiopia. JAMA
- <sup>3</sup>Populations in food insecurity in the various GHOA countries: As of 31 January 2023, <https://www.ipcinfo.org>
- <sup>4</sup>Food Security and Nutrition Working Group meeting January 2023
- <sup>5</sup>Federal Ministry of Health Ethiopia, Malnutrition update January 2023
- <sup>6</sup>IPC Food Insecurity Projection Somalia, January 2023: <https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1155938/?iso3=KEN>
- <sup>7</sup>IPC Acute Malnutrition Projection South Sudan, December 2023: <https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1155886/?iso3=SOM>
- <sup>8</sup>Ministry of Health Sudan, Malnutrition update December 2022
- <sup>9</sup>Somalia Weekly EPI/ Polio Update, Week Ending 24 December 2022
- <sup>10</sup>Ethiopia EPHI: Weekly epidemiological bulletin, week 52
- <sup>11</sup>WHO Sudan disease outbreak situation update, 25 December 2022
- <sup>12</sup>MoH Sudan Historical measles overview, presentation 20 December 2022
- <sup>13</sup>South Sudan Ministry of Health epidemiological bulletin January 2023
- <sup>14</sup>MoH Kenya, disease outbreak situation report, 01 January 2023
- <sup>15</sup>Joint WHO and MoH Djibouti country office measles data up to December 2022
- <sup>16</sup>WHO Uganda Response to Food Insecurity and Drought in Karamoja Sitrep, January 2023
- <sup>17</sup>WHO EMRO | Acute watery diarrhoea/cholera situation reports -week 52 2023
- <sup>18</sup>Joint MoH and WHO Somalia Country office data 2022
- <sup>19</sup>Kenya MoH disease data from DHIS2, 2022
- <sup>20</sup>MoH South Sudan epidemiological bulletin, October 2022
- <sup>21</sup>FMOH Sudan Malaria situation update, January -December 2022
- <sup>22</sup>Uganda malaria data, <https://www.severemalaria.org/countries/uganda>
- <sup>23</sup>2021 World Malaria Report South Sudan
- <sup>24</sup>Food insecurity projections GHOA as of January 2023. <https://www.ipcinfo.org/>
- <sup>25</sup>Greater Horn of Africa WHO IMST Sitrep 6. [https://cdn.who.int/media/docs/default-source/documents/emergencies/ghoa\\_sitrep-6\\_final.pdf?sfvrsn=ba0d3b84\\_1&download=true](https://cdn.who.int/media/docs/default-source/documents/emergencies/ghoa_sitrep-6_final.pdf?sfvrsn=ba0d3b84_1&download=true)
- <sup>26</sup>OCHA, Ethiopia: 2023 Humanitarian Response Plan, <https://www.unocha.org/ethiopia>
- <sup>27</sup>IGAD/ICPAC Weather Forecasts GHOA: As of January 2023, <https://www.icpac.net/weekly-forecast/>
- <sup>28</sup>Kenya: Acute Food Insecurity Situation February 2023 and Projection for March - June 2023. <https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1156210/?iso3=KEN>
- <sup>29</sup>Sudan Multi-Hazard Preparedness and Response Plan



- 
- <sup>30</sup> Sudan: Acute Food Insecurity Situation April - May 2022 and Projections for June - September 2022 and October 2022 - February 2023. <https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1155716/?iso3=SDN>
- <sup>31</sup> South Sudan: Acute Malnutrition Situation July - October 2022 and Projections for November 2022 - February 2023 and March - June 2023. <https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1155999/?iso3=SSD>
- <sup>32</sup> Somalia: Acute Food Insecurity Situation January - March 2023 and Projection for April - June 2023. <https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1156238/?iso3=SOM>
- <sup>33</sup> Regional Dashboard RB EHAGL: Refugees, returnees and internally displaced persons in the IGAD region as of 31 January 2023. <https://data.unhcr.org/en/documents/details/99221>
- <sup>34</sup> UNHCR - Horn of Africa drought situation - Critical Funding Needs (November – December 2022)
- <sup>35</sup> EPHI Measles outbreak Situation report, 27 January 2023
- <sup>36</sup> MoH South Sudan Epidemiological bulletin, January 2023
- <sup>37</sup> WHO Somalia PEI-EPI Weekly updates, 21 January 2023
- <sup>38</sup> WHO Sudan disease outbreak situation update February 2023
- <sup>39</sup> MoH Kenya disease outbreak situation report, 30 January 2023
- <sup>40</sup> EPHI Cholera Outbreak Daily Situation Update, 30 January 2023
- <sup>41</sup> Uganda declares end of Ebola disease outbreak | WHO | Regional Office for Africa).
- <sup>42</sup> Drought and disease dashboard, WHO Somalia office
- <sup>43</sup> Bacterial Disease Surveillance and Response Weekly SITREP, Ethiopia, vol – 64 January 2023
- <sup>44</sup> Drought response report January EMRO: [www.emro.who.int/images/stories/somalia/drought-response-report-january-2023](http://www.emro.who.int/images/stories/somalia/drought-response-report-january-2023)
- <sup>45</sup> Somalia Drought Situation Report January 2023
- <sup>46</sup> WHO Sudan Health emergency situation update, January 2023
- <sup>47</sup> Surveillance system for attacks on health care: <https://extranet.who.int/ssa/Index.aspx>