# Tropical Cyclones

# **Situation Report 05**





04 May 2019

# **1. HIGHLIGHTS**

# **Cyclone Idai**



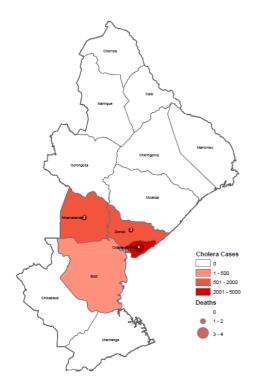
- The number of internally displaced people living in accommodation centres decreased from 160,927 to 15,476 people across 18 sites in Manica, Sofala, Tete and Zambezia, as of 30 April.
- At least 177,000 people are estimated to be in more than 50 communities that are hard-to-reach or inaccessible by road.
- Cholera outbreaks continue its down ward trend following the vaccination that reached 98.6% of the targeted population. As of 1st May 2019, there were only five cases reported in Sofala provinces.
- Since, the outbreak of cholera was declared on 27 March, a cummulative of 6,733 people including 8 deaths (CFR of 0.1%) were reported.
- Increased reported cases for Malaria, Fever and Diarrhoea in the 4 affected districts. As of 2<sup>nd</sup> of May a cumulative 23,018 Malaria cases were reported. To

mitigate the impact of malaria, more than 474,000 LLINs has been distributed and an indoor spraying campaign is ongoing targeting 628,455 people.

- There are currently four Emergency Medical Teams fully operating. As of 29 April, a total number of 31,162 patients have benefited from this service.
- 20 health workers from outbreak detection teams trained on Risk Communication and Community Engagement
- WHO is supporting rapid investigation and sample collection for laboratory testing for cholera, bloody diarrhea and other epidemic-prone disease.

# Cyclone Kenneth





Cholera cases

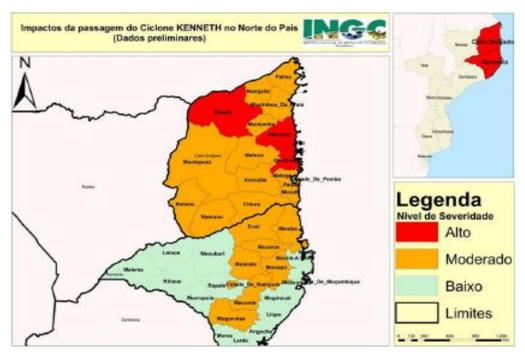


Figure 1: Impact of Cyclone Kenneth in North Mozambique as of 2 May 2019<sup>1</sup>

- Reported as of 2 May, 226,997 people have been affected by the impact of Kenneth in Mozambique. A total of 41 people have reportedly died.
- As of May 4, 52 cases of cholera were confirmed in the city of Pemba (45) and in the District of Mecufi (7).
- Following the declaration of the Cholera outbreak, a CTC at Eduardo Mondlane Health Center was established with an initial capacity of 50 beds. Further CTCs are planned in health facilities of Paquite, Mahate, Natite and HPP.
- Risk Communication and Community Engagement interventions have started including plans for a risk communication trainings as well as development of a communication strategy for vaccination campaign.
- Close Engagement with WASH cluster is being established to ensure concrete wash intervention in the mapped cholera cases areas.
- WHO in collaboration with CDC is planning a rapid outbreak investigation trainings for participants of the 17 health districts of Cabo Delgado, scheduled to take place 9-10 May 2019. Support is also provided in the implementation of the EWARS system including the organization of a training of surveillance technicians resident in the districts for outbreak investigation.

# 2. BACKGROUND AND CONTEXT UPDATE

In March 2019, the Cyclone Idai weather system brought destruction and damage to Sofala, Manica, Tete, Zambezia and Inhambane provinces. The impact of Cyclone Idai and subsequent floodings, has resulted in an estimated 1.85 million people in need of humanitarian assistance and protection. As of 8 April, the official death toll had risen to 603 people, with more than 1,641 people injured, according to the Government. More than 400,000 people were displaced with 160,927 people sheltered in 164

<sup>&</sup>lt;sup>1</sup> INGC Situation Update: Cyclone Kenneth, 2 May 2019

collective temporary accommodation centres.

As of the 30 of April, more than one month and half after this devastating event, there are still nearly 1,190,594 people in need. However, the number of internally displaced people living in accommodation centres has decreased to 15,476 people across 18 sites in Manica, Sofala, Tete and Zambezia.

Only six weeks after Cyclone Idai, on 25 April, Cyclone Kenneth reached the Mozambican coast on the extreme north of the province of Cabo Delgado, hitting Ibo, Quissanga and Macomia districts in the category 3 of Tropical Cyclone. 226, 997 people (49,101 families) have been affected by the cyclone in Mozambique. 41 people have been killed and more than 40,106 houses have been either totally destroyed (16806) or partially destroyed (23,300).<sup>2</sup> On the island of Mutemo authorities reported that at least 85% of the houses had been completely destroyed. Approximately 20,038 displaced people were sheltering in accommodation centres as of 30 April in Pemba, Quissanga, Metuge, Mocimba da Praia, Palma, Muidumbe, Macomia and Mecufi.

Several districts in Cabo Delgado and Nampula have been impacted by flooding since the cyclone hit, including Pemba district in Cabo Delgado and Erati, Memba nad Nacaroa districts in Nampula.

This is the first time in recorded history that two strong tropical cyclones have hit Mozambique in the same season.

<sup>&</sup>lt;sup>2</sup> INGC Situation Update: Cyclone Kenneth, 2 May 2019

# 3. ANALYSIS OF THE CURRENT SITUATION

#### Access to health services

Access to health care and services is still of concern with at least 91 health centres damaged by both cyclone Idai and Kenneth, while also leaving large numbers of the population displaced. 17 Health centres have been recently destroyed by cyclone Kenneth. At least 177,000 people are estimated to be in more than 50 communities that are hard-to-reach or inaccessible by road.

#### **Communicable Diseases**

The risk of communicable diseases remains of humanitarian concern with major health risks including cholera, acute watery diarrhoea, bloody diarrhoea, malaria, and other water borne diseases and conditions such as malnutrition.

#### 1. Cholera

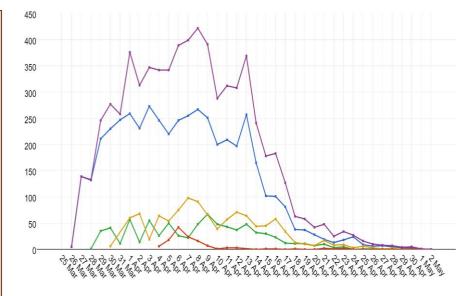
Since the declaration of the cholera outbreak on 27 March in four districts of Sofala Province, a cumulative of 6,733 cases including 8 deaths were reported as of 02 May 2019 (case fatality rate: 0.1%). Reported suspected cholera cases continue to decline across all the four affected districts; from 01 may to 02 May 7:00 am, 04 new cases of cholera were reported, down from more than 400 cases reported daily during the peak of the outbreak.

In addition, a cholera outbreak was declared in two of the districts in Cabo Delgado Province (Pemba, Mecufi) with a cumulative of 52 cases as of 04 May 2019 with no deaths reported so far. The communities have not suffered significant impacts from the passing of cyclone Kenneth, however floods occurred due to the heavy rains that hit the region in recent days. These are communities with previous history of cases of cholera in previous years.

#### Fig. 1 Epi-curve of cholera outbreak in Sofala province, 27 March - 02 May 2019

In week 18, from 29 April to 3 May, reported suspected cases from all four affected districts continued to decline; 4 new cases and no deaths were reported. The overall attack rate in Sofala Province was 567 per

100,000 population. Beira district continued to be the most affected district with an overall attack rate of 1,014 cases per 100,000 population.



Province	District	Reported suspected cases	Confirmed cases by RDT	Confirmed cases by culture	Availabilit y of CTC/ CTU/ temporar y CTC	Cases in CTC/ CTU/ temporary CTC	Deaths amongst confirmed Cases
Sofala	Beira	4731	4731				4
	Buzi	129	129				0
	Dondo	1091	1091				2
	Nhamata nda	774	774				2
Cabo Delgado	Pemba	45	11	11	СТС	14	0
	Mecufi	7	2	2	СТС	2	0
Total		6777	6738	13		16	8

#### Table 2: Cumulative cholera cases by classification and districts as of 4 May 2019

#### 2. Malaria, Fever and Diarrhoea

The increase of malaria cases as well of those for Fever and Diarrhoea need further historical trend analysis taking into consideration bias such as displacement of populations, case definitions, and completeness in reporting.

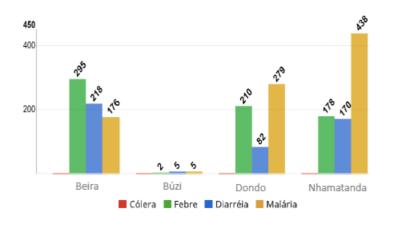


Fig. 2 Total No. of reported cases of cholera, fever, diarrhea and malaria 02/05/2019

Table 1- Number of notified cases of the priority diseases and syndromes in health facilities of Pemba and Macomia, 30 April<sup>3</sup>.

	30/abr	
Pemba		
Attendance	455	
Diarrhea	30	
Fever	85	
Malária	59	
Acute Respiratory Disease	77	
Acute flaccid paralysis	0	
Measles	0	
Acute bloody diarrhea	12	
Acute icterous fever	0	
Macomia		
Attendance	74	
Diarrhea	1	
Fever	25	
Malária	11	
Acute Respiratory Disease	1	
Acute flaccid paralysis	0	
Measles	0	
Acute bloody diarrhea	0	
Acute icterous fever	0	

# **3. PUBLIC HEALTH RESPONSE**

#### **Cholera Outbreak response**

#### Sofala province

Vaccination of high-risk populations has been completed last week reaching 43,050 people in areas accessible only by helicopters.

Following the reduction in number of cholera cases across all districts affected, WHO supported the implementation of a diagnostic strategy to monitor the progress of the outbreak and to monitor the detected strains. From 16 to 28 April, 96 stool samples were tested with RDT of which 49 (51%) were positive for vibrio cholerae. Of 43 samples tested by culture, only 13 (27%) were positive with four results pending.

#### Cabo Delgado Province

Following the start of the outbreak, a vaccination campaign is planned targeting the high risk districts.

A CTC at Eduardo Mondlane Health Center was established with an initial capacity of 50 beds. Further CTCs are planned in for the districts of Chiure, Montepuez, Meluco, Ibo, Quissanga, Ancuabe and Macomia.

WHO is providing support to the monitoring of the outbreak in both districts, in particular with regards to the implementation of the EWARS system including the organization of trainings on surveillance and

<sup>&</sup>lt;sup>3</sup> WHO Assessment of health impacts caused by cyclone Kenneth, Cabo Delgado, preliminary report 3, 3 May 2019.

outbreak investigation. A rapid outbreak investigation training for participants of the 17 health districts of Cabo Delgado is scheduled to take place 9-10 May 2019.

#### Malaria

Continued logistic and operational support are being provided to the MoH on key interventions for vector control. WHO supported investigation of refusal by some community members for IRS. The major reason for refusal was found to be inadequate communication to the community before the campaign. Efforts are being made to intensify the risk communication.

#### **Emergency Medical Teams (EMTs)**

With the stabilization of the emergency response in the provinces affected by this cyclone more EMTs handover the operation to MOH and left the country. Currently there are only 4 EMTs fully operational. WHO have been successfully supporting the Ministry of Health to run the Emergency Medical Team Coordination Cell (EMTCC) in Beira. Scheduled visits are organized to review with the EMTs their exit plans to ensure smooth transition.

As of 29 April, a total number of 31,162 patients have benefited from this service provided by 14 EMTs since the beginning of the response.

No EMTs have been deployed to Cabo Delgado up to the date of this report.

#### Surveillance

WHO is working closely with INS, Ministry of Health and partners to improve case detection and investigation, laboratory diagnosis, active surveillance and data analysis. Support continues to the Ministry of Health and INS for improvement of disease outbreak detection and expansion of Early Warning and Response System (EWARS) reporting from designated reporting sites in Sofala Province.

The training of rapid outbreak investigation teams for 8 districts has been completed. A total of 20 persons were trained from Beira, Buzi, Cain, Chemba, Dondo, Marromeo, Munhaza and Nhamatanda districts.

WHO (in collaboration with US-CDC) is supporting the MoH/INS in managing an alert system through a hotline, EWARS and M-Alert. WHO continues to support data analysis to quantify and show trends of Malaria and Malnutrition and to support production of epidemiological bulletins and daily epidemiological updates.

#### Nutrition

To identify strength and gaps of inpatient service delivery to children with severe acute malnutrition (SAM), WHO provided technical support to conduct a cross-sectional assessment of service availability in the 4 hospitals of the most affected districts (Buzi, Beira, Dondo and Nhamatanda). The key findings are as follow:

<ul> <li>Major Strengths</li> <li>Hospitals have dedicated rooms for management of children with SAM and a place to prepare feeding except for Buzi.</li> <li>Infrastructures in place for WASH, cooking areas, but needs repair.</li> <li>Available human resources cope with the current case load of SAM but need to be beefed up in case of influxes.</li> <li>Essential medical supplies are available.</li> <li>All hospitals have inpatient records to track progress of children.</li> </ul>	<ul> <li>Key gaps</li> <li>Standard anthropometric equipment not available in Nhamathanda and Buzi hospitalss</li> <li>The Nhamathanda hospital malnutrition ward does not meet the minimum standard.</li> <li>Staff knowledge on key areas on management of SAM is sub-optimum.</li> <li>No activities to promote Infant Youth and Child Feeding.</li> </ul>					
Recommendations						

Promote infant and young child feeding practices in the hospitals.
 Conduct refresher training to health workers on management of severe acute malnutrition.
 Procure standard anthropometric equipment for accurate weight measurements.
 Carry out minor repairs and installations at Nhamatanda hospital to meet the minimum standard for infrastructure.
 Strengthen infection prevention and control measures among the caregivers and health workers.
 Provide regular on-site coaching on the management of SAM to improve compliance to the protocols and benefit

new staff.

#### Infection Prevention Control (IPC)

WHO IPC Intervention Program in collaboration with IPC partners (Americares, JHPiego) includes IPC Assessment, IPC Training, discussion and delivery of WHO IPC recommendations and correction of the gaps identified. The IPC Training Plan started on 22 April and aims at training about 300 health care workers from the districts affected by the Cyclone Idai.

IPC Assessments were performed in 10 Health Centers in Beira, Dondo and Nhamatanda, 3 Cholera Treatment Centers, 2 rural Hospitals and 10 Oral Rehydratation Centers of the Sofala Province.

#### Joint health response monitoring

With the contribution of partners and close collaboration with the MOH, the M&E framework has been revised and finalized. The compendium of indicators has been revised and validated with a data matrix shared with the focal points assigned by the MOH at both national and provincial levels.

#### **Operational Support and Logistics**

Together with the Malaria program and WFP, WHO supported the distribution of 1285 bales of LLIN and delivers to 9 Hard-to-Reach locations by helicopter in South Buzi district.

Two logisticians from Beira OSL team have been sent to Pemba in order to support the startup of the response to the Kenneth cyclone. A shared truck with UNICEF containing WASH materials including a water treatment plant, plastic sheeting, tents and other logistic material have been sent from Beira and received for immediate installation. One data management officer and a health cluster coordinator will be sent to Pemba in order to provide operational support bringing the total number of WHO staff to 10. WHO will also be providing logistical support for the daily collection of information related to epidemiological surveillance

#### **Risk communication and community engagement**

Rapid needs assessment on Risk communication and community engagement (RCCE) in the province of Manica and field visits to 3 Districts, 2 Accommodation Centers and 2 community radio stations were completed. WHO provided technical support in social mobilization for the upcoming Health Week.

WHO will also provide communication support to the upcoming vaccination campaign in high risk districts of Cabo Delgado to combat rumors as not all risk zones will be covered initially.

# 4. GAPS AND CHALLENGES

- Accessibility continues to hamper access to at least 177,000 people and there are still many places that remains challenging to access by road.
- Lack of power has disrupted the vaccination programme and immediate action is required either to restore power or provide solar energy
- Expansion of EWARS to health facilities inaccessible and hard-to-reach areas, and areas with no electricity with lack of solar chargers for EWARS reporting devices.
- Poor internet access and poor digital cellular network coverage in some areas.
- Limited HR capacity in the WCO to handle sustain M&E work and support to the MOH.
- Limited availability of the designated M&E focal team at the DPS and weak completeness in reporting from the three other affected provinces (Manica, Zambezia, and Tete).
- Practice of optimum Infant and Young Child Feeding Practices remain a challenge because of prevailing poor enabling environment.
- Limited capacity for the hospitalization of cholera patients in Cabo Delgado due to the difficulty of isolation and large number of cases. The Cabo Delgado DPS is therefore arranging the installation of tents.

### 5. RECOMMENDATIONS AND NEXT STEPS

#### **Public Health Response**

- EMTs to continue providing operational surge supports to the MoH until the end of the month.
- Health workers need more training on standard case definitions of epidemic-prone diseases
- Continue to support the Ministry of Health/INS and other partners to scale-up EWARS reporting and address remaining barriers, to refine surveillance and improve health workers' knowledge of standard case definitions and to assess and analyze the situation of Malaria, Malnutrition and epidemic-prone diseases.
- Strengthen the implementation of the lab diagnostic testing strategy (cholera, bloody diarrhoea and other epidemic-prone diseases).
- Review of Community Engagement Cluster's Terms of Reference and training on Risk Communication and Community Engagement for health workers and communication professionals of community radios.
- Deployment of an external support for M&E for two-month period through WHO standby partnership in order to strengthen the MoH capacity in M&E.
- Need for Risk Communication and Community Engagement capacity reinforcement trainings for the community health workers, community radio producers and social mobilizers.
- Water quality monitoring and surveillance support to the government to testing of water quality (capacity building training, provision of test kits and reagents).
- Plan forward the consolidation and recovery phase including Health system resilience building as many partners are phasing out.

#### **Operational Support and Logistics**

- Continued work with the Logistics Cluster and CMAM to facilitate transportations and deliveries of medicines and health equipment to the health facilities, particularly at hard-to-reach areas.
- Central, peripheral and community cholera kits have been ordered in emergency and will be sent next week to Pemba to be ready should there be the need.
- Pending order of around 500,000 malaria medicines and RDTs, medical pneumonia kits as well as nutrition response materials to be received very soon.

#### **Contacts:**

WHO Country Office Representative: Djamila Cabral: <u>cabrald@who.int</u> Health Cluster Maputo: Erna Van Goor: erna\_van\_goor@yahoo.com Incident Manager Beira: Solomon Woldetsadik: <u>woldetsadiks@who.int</u> Health Cluster Beira: Luis dos Reis: <u>healthclusterbeira@gmail.com</u> Information Management Beira: Patrick Kabore: <u>kaborepa@who.int;</u> Stancelous Mverechena: <u>stancello@gmail.com</u> Luis H A Ramirez: <u>luishernando@gmail.com</u>