



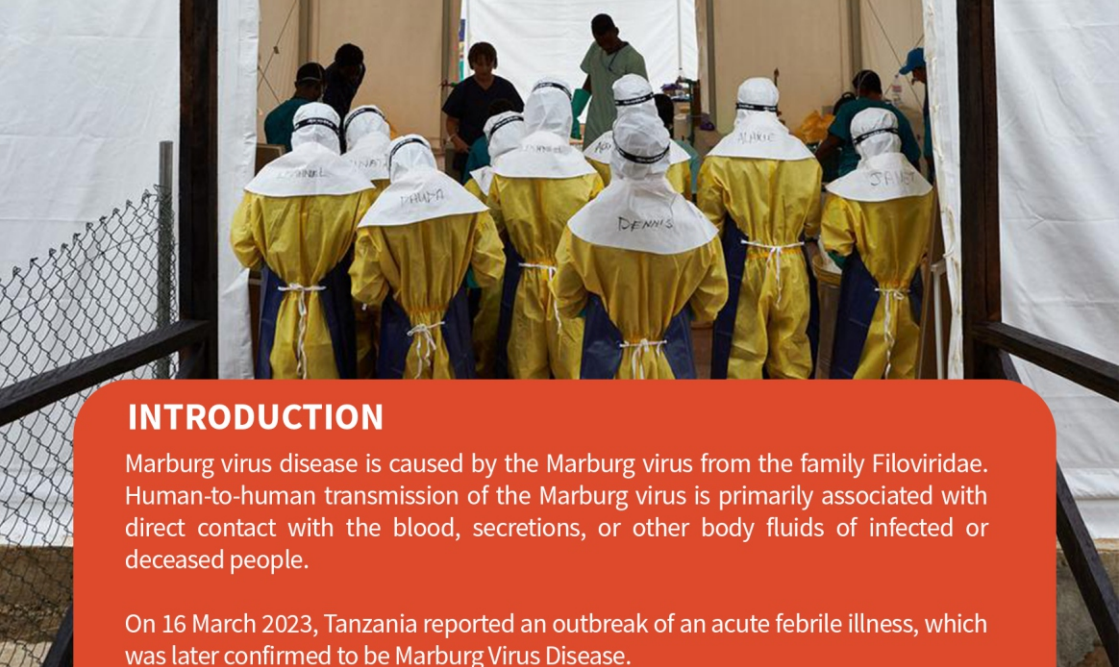
World Health
Organization



UNITED REPUBLIC OF TANZANIA

ENDING MARBURG VIRUS OUTBREAK IN TANZANIA





INTRODUCTION

Marburg virus disease is caused by the Marburg virus from the family Filoviridae. Human-to-human transmission of the Marburg virus is primarily associated with direct contact with the blood, secretions, or other body fluids of infected or deceased people.

On 16 March 2023, Tanzania reported an outbreak of an acute febrile illness, which was later confirmed to be Marburg Virus Disease.

The outbreak also involved transmission from patients to healthcare workers. This is the first known outbreak of Marburg Virus Disease reported in the country.

MARBURG VIRUS DISEASE SYMPTOMS WERE CONSIDERED AS FOLLOWS:



Fever of 38.0°C
(or 37.5°C axillary)
or higher



Headache



Vomiting
/Nausea



Diarrhoea



Abdominal
pain



Anorexia /
loss of appetite



Lethargy/
General body
weakness



Aching muscles/
joints



Unexplained bleeding, cough, rash, difficult
swallowing, difficult breathing, hiccups.



OUTBREAK STATISTICS



Out of the
9 cases

8



were laboratory confirmed to have Marburg Virus while the Index was a probable case.



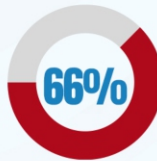
A total of **6** deaths, making a Case Fatality Rate of **66.7%** for confirmed and probable cases.



A total of **234** alerts were registered, and **60** of them had met the MVD standard case definition of a suspected case.



3 of the confirmed cases had recovered and were discharged from the Marburg Treatment Centre.



of the confirmed cases were male, and all the cases came from Bukoba District.

ACTIONS TAKEN AFTER OUTBREAK DECLARED



An Incident Management System was used to coordinate response.

A rapid risk assessment was performed to characterize the level of risk.

Rapid Response Teams were deployed to investigate and respond following the first reports.

A standard case definition was used to find more cases with similar symptoms in the community and at health facilities.

Contact tracing was done to identify and monitor people who had interacted with cases.



Specimens from deceased and living patients were collected and tested at the National Public Health Laboratory.

Cases were admitted and managed at designated treatment centres at Kabyaile and Bujunangoma Health Centres, and Bukoba Regional Referral Hospital.

An algorithm for alert verification was designed for alert management at the regional level.

An updated line list was used for data management.

Data analysis was done using EpiInfo software version 7 (CDC, Atlanta, GA, USA).

OBJECTIVES

The immediate goal of the response was to rapidly contain the MVD outbreak in Kagera region, and reduce the associated morbidity and mortality, while ensuring continuity of essential health services and protection of health care workers and the communities from the infection.

SUCCESS OF THE MANAGEMENT OF THE MARBURG OUT BREAK

The outbreak was declared ended on 2nd June 2023, after observation of 2 incubation periods (42 days) with no confirmed case of MVD.

ACTIVATION OF RESPONSE

WHO supported the Ministry of Health with coordination, surveillance, contact tracing, identification, and management of cases and infection prevention and control. Technical officers were also deployed to support coordination, surveillance, and all other components through an Incident Management System (IMS).

At the national level, response was activated to level three which is the highest level as per the country's National Emergency Preparedness and Response Plan, 2022 (9).

The IMS was organized across seven nationally determined operational pillars:



Coordination



Surveillance



Points of Entry



Risk Communication and
Community Engagement.



Case Management and IPC.



Laboratory and Diagnostics,



Operational Support and Logistics; and



Essential Health Services.

WHAT WORKED?

Early containment of the MVD outbreak in Kagera region was contributed by several factors:

The preparedness of the region to handle Viral Haemorrhagic Fevers through the readiness activities that were conducted between 2018-2022 during the EVD outbreak in Uganda and the Democratic Republic of Congo.

Prepositioning of resources (PPE, supplies, reagents) was done to ensure timely availability in case of a reported case. Rapid response teams at all levels were trained between 2018 and 2022.

Training on Strengthening and Utilization of Response Groups for Emergency (SURGE), which was conducted between February and March 2023, just before the declaration of the outbreak, provided a team of freshly trained experts to be deployed to Kagera for the response.

The availability of a mobile laboratory within the region, with the capacity to identify the pathogen was another strength that facilitated a quick and successful response to the outbreak alert.

Risk communication and community engagement, which was promptly initiated after the first alert, contributed to reducing community transmission.

The existence of National and Regional contingency and response plans was another strength that contributed to the success of the MVD outbreak response.

The presence of a national multisectoral coordination system facilitated the involvement of other sectors in the response under the guidance of the National Disaster Management Strategy **(11)**.



POST MARBURG- END ACTIVITIES



PARTNERS TO THE RESCUE

WHO led a central effort in mobilizing and Coordination. Thanks to support from **USAID** and **UK Foreign, Commonwealth and Development Office (UK-FCDO)** for funding which enabled key interventions in the different response pillars to quickly end the **marburg outbreak in Tanzania**.