

Malaria control in Ebola-affected districts in Uganda

Strengthening the Ebola virus disease outbreak response

Background

Uganda declared an Ebola virus disease outbreak in September 2022, with the first case reported in Mubende district. Two months later, the disease had spread to eight other districts. With Mubende and Kassanda as the epicentres, six neighbouring districts and the capital, Kampala, became high-risk zones due to their close proximity and high movements among the population into those areas.^[1] The rest of the country was declared at moderate risk. As of 21st November 2022, there were 141 confirmed, with 79 recoveries and 55 deaths.^[2]

Malaria is a major public health concern in Uganda, affecting almost 100 percent of the population. Data from the District Health Information System for both Mubende and Kassanda showed that the subcounties most affected by the Ebola outbreak had high malaria incidence, ranging from 44 to 301 per 1,000 people. Past experience of the impact of Ebola outbreaks in other malaria-endemic countries in sub-Saharan Africa has shown that such outbreaks overwhelm health systems and worsen malaria transmission.^[3]

Malaria and Ebola present with similar symptoms, including fever, headache, muscle pain, vomiting and bleeding. Given this overlap in symptoms, misdiagnosis is common and can result in severe illness, or even death.

Country

Uganda

Donor

United Nations Children's Fund (UNICEF)

Length of project

November 2022 – February 2023

Partners

Centers for Disease Control
Global Fund to Fight AIDS, Tuberculosis and Malaria/The AIDS Support Organization
Joint Medical Stores
Kassanda District Local Government
Ministry of Health, Uganda
Mubende District Local Government
National Medical Stores
United States Agency for International Development (USAID)/President's Malaria Initiative
World Health Organization (WHO)

Strategic objective

Accelerating burden reduction to elimination

Project outline and objectives

To ensure continued malaria services during the Ebola outbreak, and to relieve pressure on health facilities, the National Ebola Virus Disease Task Force recommended implementing a combination of interventions: mass drug administration (MDA) with dihydroartemisinin-piperazine (DP), the distribution of long-lasting insecticide treated nets (LLINs) and social behaviour change (SBC) campaigns that highlighted malaria risks. This recommendation was in line with the WHO recommendation to use MDA for malaria in emergency situations, such as disease outbreaks in malaria-endemic geographies.^[4]

In collaboration with the Ministry of Health, Malaria Consortium and project partners supported the implementation of MDA in nine subcounties in Mubenda and Kassanda in November 2022. Our campaign aimed to contribute to national Ebola outbreak control efforts through a sustained reduction in malaria morbidity and mortality. The main goals of this project were to implement a highly feasible MDA campaign and to ensure high acceptability of the intervention among the target population, which included people of all ages and those living with disabilities.

Our objectives were to:

- prevent and treat malaria infections in more than 85 percent of the targeted population through MDA
- prevent malaria transmission in more than 85 percent of the targeted population by providing LLINs
- increase demand for, and use of, malaria interventions, including SBC communication, MDA and LLIN use among 90 percent of the targeted population
- document and share best practices, lessons learnt, challenges and recommendations to guide subsequent MDA programming and implementation in complex emergencies.

Activities

Trained village health teams (VHTs), supervised by health facility workers, implemented the intervention through a door-to-door distribution model. Working with partners, we carried out the following key activities:

- National, district and community stakeholder sensitisation for 1,688 individuals to increase awareness of Ebola, malaria incidence and MDA
- Micro-planning at district and subdistrict levels to ensure adequate supply chain and logistics management distribution of MDA and LLINs
- Training of 36 health workers and 816 VHTs on Ebola, MDA and LLIN distribution, including stock management, door-to-door distribution of DP, supervision, data collection and reporting, as well as identifying and resolving bottlenecks
- Distribution of DP to a target population of 180,322 children 3 months – <15 years, including 406 people with disabilities
- Targeting of 405,355 people with information on MDA through district-level community engagement and SBC interventions to ensure service uptake
- Development of standard operating procedures and guidelines to implement malaria control interventions in the context of an Ebola outbreak
- Campaign monitoring and evaluation through distribution coverage estimates, pharmacovigilance (monitoring the safety of medicines), drug resistance monitoring and a post-MDA survey.



References

1. UNICEF. Uganda country office. Sudan virus disease (SVD) humanitarian situation report No.3. Kampala: UNICEF; 2022. Available from: <https://www.unicef.org/uganda/reports/unicef-uganda-evd-humanitarian-situation-report-0>.
2. Africa Centres for Disease Control and Prevention. Outbreak brief #9: Sudan Ebola virus disease in Uganda. Addis Ababa: Africa CDC; 2022. Available from: https://africacdc.org/wp-content/uploads/2022/11/AfricaCDC_Uganda-Ebola-Outbreak-brief-9_-23Nov22.pdf.
3. Walker PGT, White MT, Griffin JT, Reynolds A, Ferguson NM, Ghani AC. Malaria morbidity and mortality in Ebola-affected countries caused by decreased healthcare capacity, and the potential effect of mitigation strategies: A modelling analysis. *The Lancet Infectious Diseases*, 2015; 15(7): 825–32. Available from: www.sciencedirect.com/science/article/pii/S1473309915701246.
4. World Health Organization. WHO guidelines for malaria. Geneva: WHO; 2023. Available from: <https://www.who.int/publications/i/item/guidelines-for-malaria>.

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Cover image: A village health team member observes a caregiver administering dihydroartemisinin-piperazine as part of mass drug administration, Mubende district, Uganda

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