# Disaster Medicine and Public Health Preparedness

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## Letter to the Editor

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Tropical Cyclones and the Eastern Highlands of Zimbabwe: A Call for Enhanced Disaster **Preparedness** 

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Zimbabwe is a landlocked country, but its Eastern Highlands share borders with Mozambique, a coastal country prone to natural disasters. Past events show that natural disasters in the form of cyclones that affect Mozambique will likely have negative impacts in the Eastern Highlands of Zimbabwe. A case in point is Cyclone Idai in March 2019. The cyclone, which swept across Mozambique, Malawi, and Zimbabwe, destroyed massive infrastructure, including people's homes, schools, churches, and roads. Vast tracts of forests were destroyed, domestic and wild animals died, and several hundreds of people lost their lives. It is estimated that the cyclone left an estimated 2.6 million people in need of humanitarian assistance. The cyclone revealed lack of preparedness and knowledge gaps around disasters such as tropical storms.<sup>1</sup>

Barely 2 years after Cyclone Idai, Tropical Storm Ana made its first landfall in Madagascar on January 22, 2022. At least 70 people were reported dead in the immediate aftermath across Madagascar, Mozambique, and Malawi. There was destruction to homes and damage to infrastructure and displacement of over 100 000 people from their homes.<sup>2</sup> No deaths were reported in Zimbabwe. However, the preparedness of the Government of Zimbabwe in dealing with the cyclone had it exerted its full force in Zimbabwe was questionable, as very little preparatory work happened on the ground. Given the spatial relationship between Zimbabwe and Mozambique, it is highly likely that the Eastern Highlands of Zimbabwe will continue in the future to experience the devastating effects of cyclones with origins in Mozambique. Meteorological forecasts predict up to 6 more tropical cyclones before the end of the rainy season in March 2022. We therefore discussed measures necessary to enhance public health preparedness to handle natural disasters in Zimbabwe going forward.

The vulnerability of communities must be addressed in order reduce the risk of a disaster. It is with that in mind that we suggest that most of the disaster risk measures be focused on reducing vulnerability in the populations at risk of tropical storms, especially in and around the Eastern Highlands. From lessons learned in past events, it is important to have adequate mitigatory and preparedness measures in place. These include improving risk communication infrastructure and pathways to allow for the prompt dissemination of early warning messages, relaying of information to where it is needed for decision making, and implementation. It is important to set up efficient response measures, including revision and updating of currently existing disaster riskreduction protocols for response to storms, identifying, and equipping evacuation locations and conducting evacuation drills. Creating well laid out contingency plans that are in harmony and ensuring well-coordinated responses between all stakeholders and actors are necessary. This helps maximize preparedness impact and reduce the burden of scenario planning. 4 Enhancing and maintaining collaborative efforts with other regional meteorological networks for real-time updates, especially during the December-March cyclone season, are crucial.

Because Zimbabwe is a country with limited resources, we recommend that our main focus be on low-cost disaster preparedness efforts that are more proactive rather than reactive toward disasters and focused on vulnerable populations at risk. These include strengthening efforts at the local level capacity by training and providing the necessary management knowledge and communication that can be cascaded all the way down to community, household, and individual levels.

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