

# United Republic of Tanzania and Kenya's simulation of Rift Valley fever outbreak yields valuable lessons

Case study



## Abstract

The East African Community (EAC) Secretariat plays a coordinating role among its partner states in cases where a disease has either spread across a border or is occurring simultaneously in one or more of these countries. The partner states, Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda, are comprised of a region of contrasting conditions of development and stability, with increasingly mobile populations facing a wide variety of public health challenges. In June 2019, as part of its regional contingency plans for public health security, the EAC Secretariat engaged in a field simulation exercise, on the border between the Republic of Kenya and the United Republic of Tanzania at Namanga, responding to a virtual “outbreak” of Rift Valley Fever. The cross-border exercise took over one year to plan and design, and involved close to 300 participants. The exercise showed strong cooperation and coordination across borders, good and accurate assessment reports as well as difficulties in operational communications flow, following sample handling procedures and working with suspected infected animals. There is a need to disseminate available operating procedures and plans, train staff and responders at all levels on operating procedures, define the role of each sector in the One Health context, and have a clear risk communication and community engagement strategy.

## Description

### Process

The East African Community, with partner states Burundi, Kenya, Rwanda, South Sudan and Uganda, took a step forward in developing its’ health security and preparedness efforts by drawing up its “Regional Contingency Plan for Epidemics due to Communicable Diseases, Conditions and other Events of Public Health Concern 2018-2023.” Part of preparedness for and response to infectious disease outbreaks is meeting the need to continuously train and test the ability, knowledge and roles of the front-line health workers anticipating such threats to public health. The EAC Secretariat wanted to test its’ plan. In June 2019, a full Field Simulation Exercise (FSX), which is one of the key voluntary activities in the International Health Regulations (2005) Monitoring and Evaluation Framework (IHR-MEF), was held.

Michael Katende, acting head of the Health Department at the EAC Secretariat, underscored the broad reach of the goals of this FSX. “The EAC Secretariat wanted to hold this exercise to assess our preparedness in the region for any potential outbreak, which could quickly spread across borders and also across the region,”

he says. “We also wanted to test regional and national contingency plans, our regional risk and crisis communication strategy and Standard Operating Procedures to see where the gaps were.” These aspects of the FSX and its results are documented in detail in a full report titled, *Post Exercise Report*<sup>1</sup>, as well as through a lessons learned document titled *Lessons Learned from a Cross-Border Field Simulation Exercise Between Kenya and Tanzania*<sup>2</sup>.

One priority action the region has undertaken collaboratively within the East African Community to boost preparedness is through the Namanga cross-border FSX. The EAC and its partners planned the FSX around a One Health approach, involving different disciplines and sectors in pandemic preparedness and response that could be affected by an outbreak and could also contribute to preventing it or mitigating its impact on society. By engaging in an FSX, stakeholders can attempt to deploy innovative communication methods and develop capacities by identifying where training needs to

<sup>1</sup> <https://www.who.int/news-room/feature-stories/detail/cross-border-disease-outbreak-simulation-exercise-reinforces-preparedness-in-east-africa>

<sup>2</sup> [http://health.bmz.de/events/Events\\_2019/assessing\\_outbreak\\_response\\_capacities\\_eac\\_region/Lessons\\_Learned\\_From\\_a\\_Cross-Border\\_Field\\_Simulation\\_Exercise\\_Between\\_Kenya\\_and\\_Tanzania\\_DP.pdf](http://health.bmz.de/events/Events_2019/assessing_outbreak_response_capacities_eac_region/Lessons_Learned_From_a_Cross-Border_Field_Simulation_Exercise_Between_Kenya_and_Tanzania_DP.pdf)



be conducted to move forward to close gaps in preparedness and response. Objectives for the Namanga FSX included testing early warning and event detection mechanisms at ports of entry, deploying national Rapid Response Teams, activating and deploying mobile laboratories, and practicing regional procedures for cross-border pandemic preparedness, risk and crisis communication including community engagement.

Planning and running a FSX is complex and laborious. It took 18 months to plan and design this exercise that included a table-top exercise nine months prior to the event that involved coordination among EAC officials, representatives from East African ministries of health, agriculture, tourism, trade, environment and defence, private industry, public health experts, community and religious leaders, the military and the police. This kind of exercise—and the collaboration it fosters—helps to evaluate a country’s capacity to prevent, detect and rapidly respond to public health risks occurring naturally or due to deliberate or accidental events. Enacting this framework is a priority for the EAC.

The FSX engaged nearly 300 participants from Kenya, Tanzania, the East African Community secretariat, more than a dozen

regional and international institutions and several multi-disciplinary, multi-sector aspects. Responders, health care workers, researchers and government officials alike went into high gear, reacting by reporting to local authorities, convening the EAC’s emergency operations center, activating health facilities and mobile laboratories, inspecting slaughterhouses, and managing border crossings including an attempted smuggling of “infected meat and milk.”

The FSX took place over four days in June 2019. The first three days of the exercise began with a request for investigation into potential Rift Valley Fever cases on farm sites on both sides of the frontier, progressing through specimen collection and mobile lab activation, growing media interest in dead animals, trade and tourism issues, admission of patients with suspected fever, and border crossing attempts by both people and livestock simulating infection. The simulation included a strong community engagement component, with risk communicators manning posts in Nairobi, Dodoma and Namanga during the exercise; they collected information from experts, identified audiences and channels, prepared key messages and wrote press releases, coordinated risk communications efforts at the local, country and regional levels. On the

fourth day, debriefings took place where the main lessons and findings were summarized and agreed upon. The exercise showed strong cooperation and coordination across borders, good and accurate assessment reports as well as difficulties in operational communications flow, in following sample handling procedures and in working with suspected infected animals.

***My main lesson learned is that in the case of an outbreak all agencies - even beyond those involved in One Health - need to come together and deal with the situation. If you don't deal with it as a coordinated group, organisation or team, you are not going to be able to control the outbreak. It is important that every sector is involved and assist where it can, if it is a real emergency, Pauline Kituyi from the Ministry of East Africa Community and Regional Development Authority in Kenya.***

***This field simulation exercise has been an eye-opener and it provided an opportunity to reassess and to evaluate the progress made, especially with regards to the documents developed and human resource capacities, in terms of outputs and collaboration and coordination between sectors and between partnering states and actors. The biggest challenge I have seen - and that was obvious - was coordination. However, this is usually also the case in real scenarios, unless you plan very well, do drills again and again and evaluate and re-evaluate. Fasina Folorunso, FAO/Emergency Centre for Transboundary Animal Diseases, Team Leader Tanzania***

The impact of the FSX is still being felt, with its many lessons learned being put to use, as Lyndah Makayotto, a senior medical officer and epidemiologist at Kenya's Ministry of Public Health and Sanitation, puts it. ***"We are in the process of sensitizing the leadership, senior management and policy makers on the importance of having some of our bureaucracy reduced in outbreak scenarios, as emergencies don't wait for anybody,"*** she says, ***"but it will still take time. However, I hope that it will happen."***

## Way forward

Some of the challenges pointed out by the FSX include the need to disseminate available

operating procedures and plans, as they are still not widely known. Additionally, training capacities are not sufficient, especially at the EAC Secretariat level. Staff and responders at all levels need to be familiar with operating procedures. In the One Health context, the role of each sector and discipline in outbreak preparedness and response needs to be clearly defined and elaborated. The importance of clear risk communication and community engagement, already a priority, is brought into the limelight by going through an event like the FSX. Involving stakeholders in a simulation exercise under a One Health approach, makes it easier to understand their roles and illustrates potential ways they could contribute in the future during response to disease outbreaks.

## Lay Summary

In June 2019, the East African Community secretariat, Kenya, Tanzania and international partners engaged in a complex and broad-ranging four-day simulated field exercise (SimEx) based on a scenario modelling a suspected outbreak of Rift Valley Fever along the border town of Namanga.

This was done to test regional and national contingency plans and engage health workers in procedures for preparing and responding to any potential outbreak; it also aimed to assess regional risk and crisis communication capabilities. The exercise brought together nearly 300 participants and took 18 months to plan and coordinate. The SimEx delivered a detailed portrait of the capacities in this region in preparing for and responding to infectious disease outbreaks and other health emergencies. It showed strong cooperation across borders, good and accurate disease assessments, as well as difficulties in operational communications flow, following sample handling procedures and working with suspected infected animals. Going through the SimEx made it easier to understand roles for stakeholders and how to fully engage in those roles during preparation and response to disease outbreaks in the future.

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ISBN 978-92-4-001850-1 (electronic version)

ISBN 978-92-4-001851-8 (print version)

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