Evaluating Disease Outbreak Response: After Action Review Critical to Improved Preparedness, Surveillance, Investigation and Response in Uganda

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Key Message

Prioritizing multi-disciplinary, collaborative approaches to systematically evaluate outbreak response efforts is critical in preparing for and responding to epidemics in human, animal and wildlife populations. In Uganda, a collaborative trans-disciplinary One Health approach has been useful in applying lessons learned towards anticipated future outbreaks.

Methodology

Following outbreaks of yellow fever and Ebola in Uganda in 2010/11, USAID’s Emerging Pandemic Threats: RESPOND and IDENTIFY programs supported Uganda’s Ministry of Health in a post-outbreak response action review. The two day workshop was led by Uganda’s National Task Force (NTF) for Epidemic Preparedness and Response. More than 50 workshop participants included representatives of the NTF, district and national level representatives of Uganda ministries of health, agriculture, wildlife and prime minister’s office, academia, and supporting partners including WHO-AFRO, US and Uganda Centers for Disease Control and Prevention, Doctors Without Borders, United Nations Children’s Fund (UNICEF) and the African Field Epidemiology Network (AFENET). The AAR generated a final report detailing successes, challenges, lessons learned and key recommendations from each of the different NTF subcommittees. Select lessons learned and key recommendations, pertaining to One Health approach, are highlighted here.

Key Recommendations

• Permanent NTF committees should be established at the national and district level.
• A multi-disciplinary and multi-sectoral approach, and hence One Health, should be embraced, as 75% of emerging disease outbreaks are zoonotic in nature.
• National and district NTFs committees should continue to meet at least quarterly in the absence of an outbreak.

Background

Outbreaks of Ebola, Marburg, yellow fever, anthrax, nodding disease, West Nile, rift valley fever, brucellosis, tuberculosis and typhoid (among others) in recent years have marked Uganda as a global emerging disease hot spot. One critical step in preparing for emerging infectious disease outbreaks, is conducting ‘after-action review’ (AAR) of actual disease outbreak responses. A consensus-driven approach facilitates better understanding of elements that work effectively, and those needing improvement from local to national to international levels. Lessons learned and key recommendations from AARs can be applied in a manner consistent with WHO’s International Health Regulations and Integrated Disease Surveillance and Response Technical Guidelines. Additionally, including health professionals from animal / environmental / wildlife and other inter-related disciplines in AARs, provides opportunity to harmonize and synergize disease surveillance, control and prevention efforts across human, animal and environmental interests. Lack of human resources, funding, additional outbreaks, competing policy and political considerations – are often cited as barriers to conducting after-action reviews.

Map and Select Photos

Launch of yellow fever vaccination campaign in Kitgum (Top) and Pader (Bottom) districts in Northern Uganda – Jan 2011.

Select Lessons Learned

Yellow Fever 2010-11
• Use of multi-sectoral / multi-disciplinary approaches to social mobilization is key in achieving active community participation and involvement.
• Good collaboration and team work with different stakeholders leads to successes in mobilization.
• For complex epidemics a multi-disciplinary team / One Health approach was the best option to solving the complex problem.
• Training local communities to report unusual diseases occurrence in animals is a vital component of the early warning system.

Ebola 2011
• Strong partnership between government, partners (WHO, CDC, AFENET, MSF) greatly contributed to effective surveillance for outbreak response.
• Prompt & coordinated response to the initial case contributed to limiting the extent of the outbreak.
• Availability of personal protective equipment for service providers improved their confidence and willingness of the health care workers to handle suspect cases.
• Emergency funds at national and district levels facilitates rapid outbreak investigation and response.

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