Strategies to Prevent (STOP) Spillover

Impact Brief

STOP Spillover at AFROHUN Fourth International One Health Conference

Panel Discussion: Addressing Spillover of Zoonotic Diseases at Risky Interfaces Hiding in Plain Sight

INTRODUCTION

The Strategies to Prevent Spillover (STOP Spillover) project held a panel session at the 4th AFROHUN International One Health Conference in Nairobi, Kenya, on 24th-26th April, 2024.The session was moderated by the STOP Spillover Project Director and presenters were STOP Spillover country team leads from Côte d'Ivoire, Liberia, Sierra Leone, and Viet Nam.

STOP Spillover team at closing ceremony

STOP Spillover addresses the risks posed by known zoonotic viruses with the potential to spillover from animals to humans and cause outbreaks, epidemics, and pandemics, and implements interventions to minimize these risks. It provides local stakeholders with critical opportunities to enhance their understanding of the complex drivers of viral spillover, augment sustainable national capacities in surveillance and risk analysis and to develop interventions that reduce the risk of spillover.

STOP Spillover Themes

Liberia presented their study on characterizing the mechanisms of Lassa fever virus spillover and developing, testing, and implementing risk-reducing interventions. They demonstrated the documentation of the true risk of Lassa virus in reservoir hosts, which is critical to public health policy and practice to bring awareness to the presence of Lassa virus outside the regular Lassa belt-endemic regions in West Africa. STOP Spillover Liberia is also strengthening the diagnostic capacity of the environmental health sector, in collaboration with the National Research Laboratory in Liberia.

STOP Spillover panel session moderated by Hellen Amuguni. Panelists included Edward Magbity (Sierra Leone CTL), Ha Nguyen Ngoc (Viet Nam CTL), Vivian Lymas Tegli (Liberia CTL) and Daniele Konan (CDI CTL).

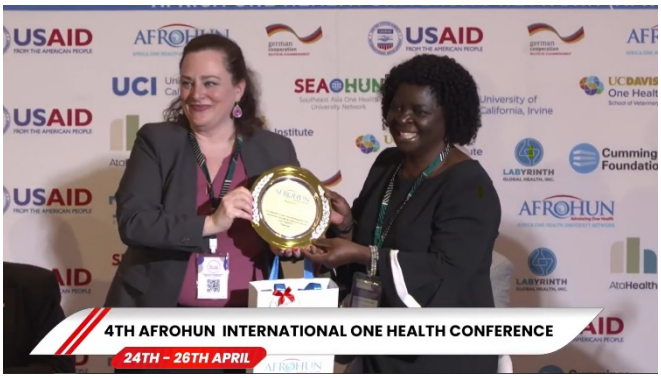
In Côte d'Ivoire, STOP Spillover has demonstrated the utility of using human wastewater and non-human animal liquid waste effluent sampling as mechanisms for disease detection and early warning. These novel results demonstrate benefits of using pooled waste for community- and population-level surveillance (mostly done in high-income countries) in low- and middle-income countries and shows that waste streams and effluent can be sampled with inexpensive passive samplers to obtain high-quality results.

In Sierra Leone, for the first time, a hands-on tabletop simulation exercise for outbreak response was conducted at the community level with local stakeholders. The simulation focused on strengthening community-level readiness for a potential Lassa fever outbreak and tested preparedness and response system efficiency, staff capabilities, and community readiness.

In Viet Nam, STOP Spillover is working in the captive wildlife farming sector in Dong Nai, which has been identified as a high-risk interface due to the intensity of interactions among humans and wildlife. Using a modified Trials of Improved Practices (TIPs) a participatory formative research method used to test and refine potential interventions on a small scale, prior to broader implementation, they have pilot tested and evaluated the practices on biosecurity, biosafety, and waste management interventions, such as enhancing PPE use to reduce potential for exposure, improving waste management, handling, and processing on wildlife farms (priority given to civet and bamboo rat facilities).

Recognition

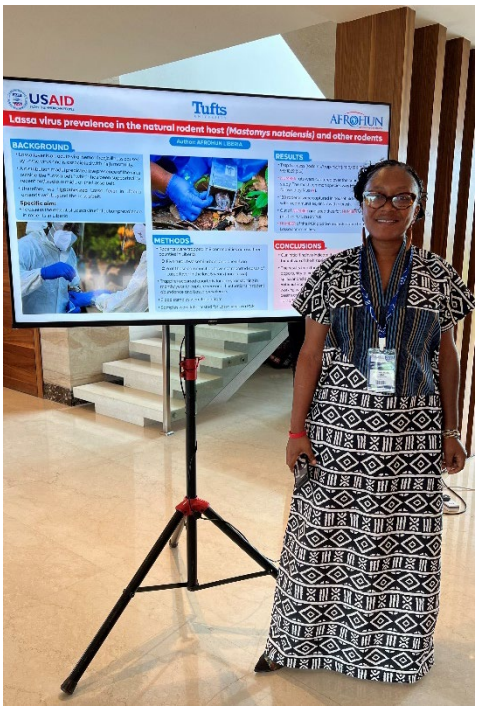
Dr. Hellen Amuguni, the Project Director for STOP Spillover, was recognized by the AFROHUN fraternity, and received an award for her continued support to the AFROHUN network over the past 15 years.



Hellen Amuguni receives her award from Marilyn Crane, Senior Higher Education Advisor, Emerging Threats Division, USAID Washington

Conclusion

While STOP Spillover focuses on known viral threats that pose significant public health risk, local capacities developed over the life of the project help ensure that partner countries and stakeholders are better prepared to prevent the spread of these and future zoonotic viruses. By implementing locally designed interventions, and evaluating the social, gender, economic, and environmental acceptability, and effectiveness of each local intervention, STOP Spillover countries are strengthening their capacity to develop, implement and validate interventions to reduce spillover.



Vivian Lymas Tegli, Liberia Country Team Lead, presents her poster "Lassa virus prevalence in the natural rodent host (Mastomys natalensis) and other rodents"

Prof. William Bazeyo, AFROHUN CEO, Marilyn Crane, USAID Washington and Hellen Amuguni, STOP Spillover Project Director

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