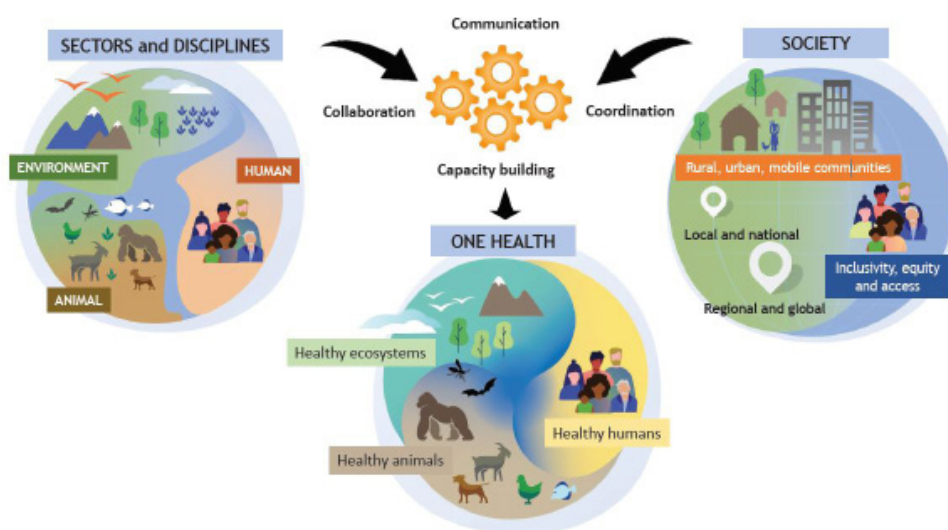


Uganda One Health Epidemiological Bulletin

Volume 1, Issue 2, December - February, 2021



In this Issue:

- EAC OH Strategy
- OH Day Commemoration
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- Multi-sectoral Self-assessment
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Dear Reader,

We are pleased to introduce to you the second Issue of the Uganda One Health Epidemiological Bulletin. The bulletin is a product of the Ministries of Water and Environment (MWE), Health (MoH), Agriculture, Animal Industry and Fisheries (MAAIF), and Uganda Wildlife Authority (UWA) under the National One Health Platform (NOHP) umbrella.

This bulletin aims to inform One Health (OH) practitioners at district, national, and global levels on interventions undertaken in detecting, preventing and responding to OH events in Uganda.

We hope you enjoy reading this Issue,



John Makombo
AG. EXECUTIVE DIRECTOR, UWA / CHAIR NOHP

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National Validation of the East African Community (EAC) One Health Strategy, November 2021

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The 19th EAC sectoral Council of Ministers directed the EAC secretariat to strengthen multi-sectoral collaboration and coordination by developing a regional One Health Strategy. Furthermore, partner states were directed to promote and strengthen interdisciplinary collaboration using the One Health approach in preparedness and response. Pursuant to this directive, the EAC secretariat with support from the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) initiated the development of an EAC Regional One Health Strategy. A team comprising of experts from partner states and international development partners was established to develop the strategy. Following completion of the final draft, partner states were tasked to organize national validation meetings and a generic program was drafted and adopted.

In Uganda, the meeting was held between 10 – 12 November 2021 at Lake Victoria Hotel in Entebbe. The meeting was attended by key One Health stakeholders: Ministry of Agriculture, Animal, Industries and Fisheries (MAAIF); Ministry of Health; Uganda Wildlife Authority (UWA); Ministry of Water and Environment (MWE); Infectious Disease Institute (IDI); National Action Plan for Health Security (NAPHS) acceleration team; Baylor-Uganda; US-CDC; Food and Agriculture Organization; Africa One Health University Network; Tackling Deadly Diseases in Africa Project; World Health Organization; Ministry of East African Affairs; National One Health Platform; Uganda Medical Association and Makerere University School of Public Health.



Participants during the EAC OH Strategy validation, 2021

The meeting utilized both physical and virtual (Zoom) participation. Participants were divided into three groups under which they reviewed the different chapters of the strategy and shared with the rest team at the end of each day. Participants successfully reviewed and validated the strategy and accented to it during a placard signing ceremony.

Uganda Celebrates World Rabies Day, 2021

Editor

Rabies is a viral zoonotic, viral disease spread to people from animals (most commonly dogs) through bites or scratches, usually via saliva. Once clinical symptoms appear, rabies is virtually 100% fatal; fortunately, it is vaccine preventable.

On 28 September 2021, Uganda joined the world to celebrate World Rabies Day under the theme, "Rabies: Facts, not Fear". The event was held in Arua District- a hotspot for Plague, another priority zoonotic disease.

In attendance were the Ministry of Agriculture, Animal Industries and Fisheries (MAAIF), Ministry of Health (MoH), Makerere University College of Veterinary Medicine, Animal Resources and Bio-security (COVAB), Ministry of Education (MoE), District Local Government officials and partners- Food and Agricultural Organization (FAO), World Health Organization (WHO) and the World Organization for Animal health (OIE).



During the event the team vaccinated dogs and cats and sensitized the public on rabies.

There is a global initiative geared towards a “zero human deaths from canine rabies by 2030” target. This calls upon countries to implement policies, human and animal interventions, awareness raising and promotion, capacity building, and the respective resources needed to eliminate rabies. Uganda has drafted a rabies elimination strategy document that is awaiting review by stakeholders. Ongoing interventions to control rabies include routine public awareness on rabies conducted jointly by MoH and MAAIF, animal vaccination and availing post-exposure prophylaxis for humans bitten by suspected animals. Vaccination is key. Generally, the cost of vaccinating dogs has fallen to about 1 USD per dog, in contrast, the average cost of managing rabies exposure through post-exposure prophylaxis (PEP) is estimated at an average of 108 USD.

Commemoration of International One Health Day, 2021

Editor

On 3 November 2021, the team joined the National One Health Platform (NOHP), Uganda Wildlife Authority (UWA) and other stakeholders to celebrate the 6th International One Health Day. Uganda’s theme for the 2021 One Health day was, “One Health for improved health security”. The event was held at Queen Elizabeth National Park (QENP) in Kasese District.

At the event, a Biosafety Level 2 (BSL 2) wildlife laboratory was opened at Mweya, QENP. Defense Threat Reduction Agency (DETRA) and United States Embassy donated the funds and other resources for the construction of the laboratory, equipment and training of personnel. This is the first wildlife BSL 2 in Uganda. The laboratory will contribute to national disease surveillance in Uganda through detection of zoonotic pathogens e.g. foot and mouth disease, brucellosis, anthrax and other pathogens of One Health importance.

Services will supplement existing district, QENP and community needs. In addition, it will strengthen cross-border surveillance and collaboration between QENP and Virunga National Park in Democratic Republic of Congo. This will benefit Uganda’s commitment to the global health security agenda in strengthening zoonoses surveillance and diagnostics capacities to prevent the national and international spread of dangerous pathogens.



U.S. Ambassador Natalie E. Brown and UWA Executive Director Samuel John Mwandha (current Chair of NOHP) open the Mweya BSL 2 wildlife lab at QENP



NOHP members at the ceremony at QENP



World Organizations agree on Definition of “One Health”

FAO, OIE, WHO and UNEP

The global organizations - the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE) and the World Health Organization (WHO) form a joint tripartite for promoting the One Health approach. The tripartite (FAO, OIE and WHO) together with the United Nations Environment Programme (UNEP) collaborate to mainstream the global One Health agenda so that they are better prepared to prevent, predict, detect, and respond to global health threats and promote sustainable development.

The four leading organizations have welcomed a new operational definition of One Health. The definition was developed by the One Health High Level Expert Panel (OHHLEP), an advisory panel composed of multi-disciplinary experts from around the world. The One Health definition developed by the OHHLEP states:

“One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and inter-dependent. The approach mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being and tackle threats to health and ecosystems, while addressing the collective need for clean water, energy and air, safe and nutritious food, taking action on climate change, and contributing to sustainable development.”

The new comprehensive definition aims to promote a clear understanding and translation across sectors and areas of expertise. While health, food, water, energy, and environment are all wider topics with sector-specific and specialist concerns, the collaboration across sectors and disciplines will contribute to protecting health, addressing health challenges such as the emergence of infectious diseases and antimicrobial resistance and promoting health and integrity of our ecosystems. Moreover, One Health, linking humans, animals and the environment, can help to address the full spectrum of disease control – from disease prevention to detection, preparedness, response, and management – and to improve and promote health and sustainability.

The approach can be applied at community, subnational, national, regional, and global levels, and relies on shared and effective governance, communication, collaboration and coordination. With the One Health approach in place, it will be easier for people to better understand the co-benefits, risks, trade-offs and opportunities to advance equitable and holistic solutions.

An infographic was developed to accompany the One Health Definition. This infographic has already been adopted by this Issue of the Bulletin on the first and last pages.

This article was extracted from the Joint Tripartite (FAO, OIE, WHO) and UNEP Statement on <https://www.oie.int/en/tripartite-and-unep-support-ohhleps-definition-of-one-health/>



Assessment of Preparedness of Border Districts to respond to Plague in West Nile Region, Uganda, August 2021

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Introduction

Ituri Province in Democratic Republic of Congo (DRC) is a hotspot for plague. In 2021, at least 117 cases were reported in Ituri, including cases in a newly-affected health zone – Fataki (1). During 22 April - 13 June 2021, Fataki Health Zone reported 37 suspected pneumonic plague cases, including 12 deaths (CFR =32.4%) (1), (2). Fataki Health Zone which was last affected by plague at least 10 years back is currently experiencing a re-emergence. Fataki Health zone registered at least 37 suspected pneumonic plague cases, including 12 deaths, between 22 April-13 June 2021.

Plague is endemic in Uganda's West Nile Region, particularly in Arua and Zombo Districts. Seventy eight (78) plague cases were identified during 2008-2016 (3). Two human plague cases including one fatality occurred in West Nile Region in 2019 following importation from neighbouring DRC (3). Due to the closeness of Fataki Health Zone to Uganda's border (80 km from Zombo District border) and history of plague importation from DRC, plague importation in West Nile Region was anticipated (1).

In response, Ministry of Health deployed a multi-sectoral national rapid response team to define risk of plague importation and level of preparedness to respond in six border districts and one city in West Nile Region.

Methods

We used the Population Connectivity Across Borders (POPCAB) toolkit to assess risk of plague importation in 6 West Nile districts and 1 city. We conducted 16 Key Informant Interviews (KII) and 21 Focus Group Discussions (FGD) with an average of 6 participants (n = 137). We purposively selected KII and FGD participants to include district and village health teams, political leaders, border health staff, boda-boda riders, market traders, and business community members. During KII and FGD, we assessed types of travellers coming from DRC to Uganda, identified commonly-used routes and points of entry (PoE), reasons for travel, and places frequently visited. The FGDs also assessed community knowledge and practices on plague. Interviews and FGD were recorded, notes taken and later transcribed verbatim. We drew maps on routes and PoE.

We categorized districts' risk of plague importation into two categories based on previous cases, volume of cross-border movements, and proximity to the plague outbreak epi centre – Ituri Province. We assessed districts' preparedness to respond using an adapted World Health Organization checklist and ready score criteria (scores <40% = 'not prepared'). We assessed 47 health facilities in West Nile Region for response preparedness in terms of healthcare worker training, availability of standard operating procedures, and training of village health teams.

We created composite scores using principal component analysis. We rated the scores <2 as 'not prepared', 2 – 3.9 as 'partially prepared', and 4 – 5 as 'adequately prepared'.



Results

The POPCAB identified 8 districts most frequently visited by travellers from DRC to Uganda: Zombo, Arua, Nebbi, Pakwach, Maracha Koboko, Gulu and Kampala. We identified 11 official PoE commonly used by travellers between DRC and Uganda (Figure 1). Zombo and Arua Districts were in category one of risk (highest risk) of importation of plague while the others were in category two. However, the travellers also use illegal routes.

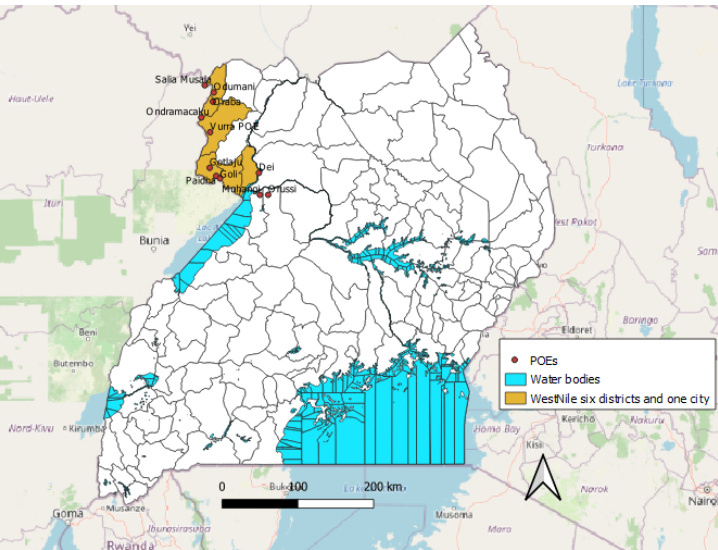


Figure 1: PoE frequently used by travellers between DRC and Uganda, 2021

The main categories of reasons for travel were business, healthcare services, family/friend visits and social services. Travellers mainly use bicycles, tricycles (tuku- tukus), trucks carrying other goods and boats (in Pakwach).

In preparedness to respond, all 6 districts and 1 city scored <40%. Zombo and Arua Districts had the highest scores (39%) in comparison to other border districts (Figure 1).

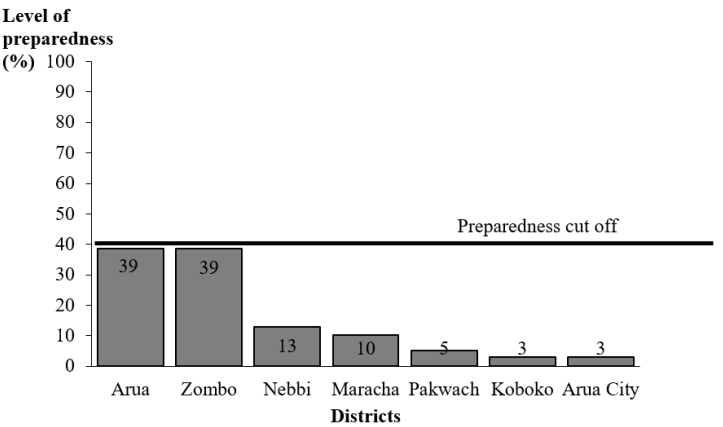


Figure 2: Level of preparedness by district and city in West Nile Region, 2021

Of 47 health facilities assessed, none was adequately prepared to respond to plague. Among the 25 (53%) partially prepared health facilities, Zombo District had the highest number (8; 32%) followed by Arua (5; 20%) while Koboko had none. All seven facilities assessed in Koboko District were not prepared (Table 1). Ten (21%) health facilities had staff trained in previous two years.

Table 1: Preparedness of health facilities to respond to a plague outbreak

District	Not prepared	Partially prepared	Adequately prepared
Zombo	0	8	0
Arua	3	5	0
Maracha	3	4	0
Nebbi	6	5	0
Arua city	0	1	0
Pakwach	3	2	0
Koboko	7	0	0
Total (n = 47)	22	25	0

In the FGDs, 79% (108) participants knew that plague can be spread by a bite of an infected flea or through contact with a person infected with plague and or through inhalation of air containing plague causing micro-organisms. Seventy five percent (103) of FGD participants were knowledgeable on plague prevention through practising good hygiene practices like cleaning homes, clearing bushes around the homes and ensuring that food is always covered. Only 25% (34) had observed dead rats in their communities though these died from poisoning.



Discussion

Zombo and Arua Districts were in category one (high risk of importation of plague). Strong population connectivity across borders is perpetuated by business, search for health and medical services and social activities and insecurity in DRC which force people to seek refuge in Uganda. Zombo and Arua Districts were more prepared to respond to plague in comparison to other border districts in West Nile Region. However, preparedness in all districts was below the WHO recommendation.

The high risk of plague importation found in Arua and Zombo Districts is not surprising. In 2019, Zombo District imported two cases of human plague with one fatality (4). Our study reported cross border movements in the six border districts and one city. Similarly, Apangu et al., reported increased risk of cases from DRC crossing into West Nile Region particularly Arua and Zombo Districts during plague outbreaks (3). A 2018 assessment reported that cross border movements between Uganda and DRC are facilitated by trade, healthcare services, insecurity and social amenities in both countries (5). Likely, proximity to the epicenter in DRC and high cross border movements between Uganda and DRC contribute to risk of plague importation in West Nile's border districts.

Neither the six border districts and one city, nor their health facilities were prepared to respond to plague in case an introduction occurred. Similarly, a 2018 assessment of Ebola infection prevention and control capacity in border districts of Bundibugyo, Kabarole and Kasese Districts established that preparedness in health facilities was lacking (5). Another study on preparedness of health care systems for Ebola outbreak response in Kasese and Rubirizi Districts found them unprepared (6). Enhancing disease preparedness and response strategies is vital especially when population movement patterns between an outbreak area and neighbouring countries has been established.

The community was knowledgeable about plague, its transmission and prevention. Despite a high level of understanding of plague in Arua and Zombo Districts, public health educational messages since plague is endemic in this region (7).

Conclusion

West Nile districts and the city that share a border with DRC had a high risk of importation of plague from DRC due to high population connectivity across borders. The districts and their health facilities were not prepared to respond to plague importation. Community members were knowledgeable about plague. These findings highlight the need to strengthen preparedness and response efforts in the West Nile Region ahead of imminent plague occurrence.

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Decentralization of One Health in nine districts in Uganda, 2019 - 2020

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Introduction

In 2016, the Ministries of Agriculture, Animal Industries and Fisheries (MAAIF), Health (MoH), Water and Environment (MWE), and Uganda Wildlife Authority (UWA) adopted One Health (OH) through a memorandum of understanding (1). This led to the formation of a National One Health Platform (NOHP)(2). However, OH operationalization has prioritized the national level over sub-national levels where they are equally needed. One Health challenges are shared responsibilities that should be decentralized.

Methods

In September 2019, the NOHP conducted a five-day multisectoral meeting in Jinja to develop training materials, guidelines and terms of reference (TOR) for activation of District One Health Teams (DOHTs) in Uganda. Materials for ten training modules were approved by a One Health Technical Working Group (OHTWG):

1. Introduction to One Health
2. General principles of surveillance
3. Principles of Outbreak investigation,
4. Introduction to Integrated Disease Surveillance and Response (IDSR) and Performance of Veterinary Services
5. Leadership
6. Management and Administration
7. Conflict Management Advocacy and Resource Mobilization
8. Communication and social mobilization,
9. Information Management
10. One Health planning for risks and hazards in districts

In November 2019, a national training of trainers consisting of 25 multi-sectoral and multidisciplinary NOHP members was conducted. Phase one of OH decentralization prioritized five districts (Lyantonde, Luwero, Kanungu, Kisoro and Nakasongola) in the cattle corridor that have borne the brunt of zoonotic diseases in Uganda. A five-day training of DOHTs utilized facilitator led presentations, group work, practical sessions and role play guided by the training materials. Trained DOHTs were activated and provided with ToR.

Following phase one, Government of Uganda adopted the model to activate four DOHTs in Kiryandongo, Kween, Tororo and Busia. Eleven months post-DOHT activation, the NOHP returned to assess, evaluate and score their functionality under three themes: multi-sectoral, coordination and one health, cross-sectoral collaborations and zoonotic disease management. Evaluation utilized a checklist; results were entered and analyzed using Microsoft Excel.

Results

Nine (9) DOHTs in Nakasongola, Kiryandongo, Luwero, Lyantonde, Kisoro, Kanungu, Kween, Tororo and Busia were trained and activated. Each DOHT training comprised of 25 multi-sectoral members including:

- | | |
|---|----------------------------------|
| 1. District Health Officers | 8. Private Hospitals |
| 2. District Surveillance Focal Person | 9. District Planner |
| 3. District Veterinary Officer | 10. District Biostatistician |
| 4. District Animal Health Surveillance Focal Person | 11. District Education Officer |
| 5. District Laboratory Focal Person | 12. District Health Educator |
| 6. District Community Development Officer | 13. District Water Officer |
| 7. District Environment Officer | 14. Non-Government Organizations |



Figure 1: Lyantonde District One Health Team Training, November 2019



Among the three themes assessed, DOHTs had the highest average score in multisectoral, coordination and One Health (79%) in comparison to cross-sectoral collaborations (73%) and zoonotic disease management (57%).

Theme 1: Multisectoral, coordination and one health

Multisectoral, coordination and One Health had 13 attributes. Ten of the 13 attributes assessed had the nine (9) DOHTs score above the 50% cutoff earning an average score of 73% (Table 1).

Table 1: Score of DOHTs in the multisectoral, coordination and one health

Multisectoral, coordination and One Health	%DOHTs (n=9)
Correct understanding of One Health	100%
District has OH focal person	100%
DOHT comprises 4 key sectors (health, animal health, wildlife and environment)	89%
District experiences challenges during implementation of OH activities	89%
District implemented OH activities	89%
District received OH trainings	78%
District conducted DOHT meeting post inception	78%
More than 4 members attended one health training	78%
District developed solutions to identified challenges	78%
District has an implementation/work plan for OH activities	78%
Recently implemented a joint OH activity	33%
Report sharing with National One Health Coordination office	33%
Involvement in National One Health Platform activities	22%
Average score	73%

Theme 2: Cross-sectoral collaborations

The nine DOHTs had an average score of 79% in four attributes assessed under cross-sectoral collaborations (Figure 2).

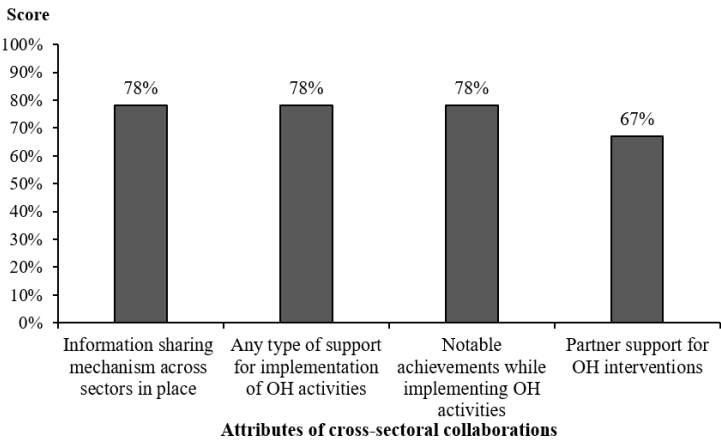


Figure 2: Scores of DOHT in cross-sectoral collaborations

Theme 3: Zoonotic disease management

Among the eight attributes in zoonotic disease management, the nine DOHTs had an average score of 57% (Table 2).

Table 2: Scores of DOHTs in zoonotic disease management

Zoonotic disease management	%DOHTs (n=9)
Surveillance system for all sectors in place	55%
Increase in alerts of zoonotic nature	67%
Detected zoonotic disease (animals)	55%
Detected outbreak of priority zoonotic disease (PZD) (animals)	67%
Confirmed outbreak of PZD (animals)	55%
Same PZD confirmed in animals and humans	55%
Reported mortalities (animals and or humans)	55%
Joint outbreak investigation	45%
Average score	57%

Discussion

Nine multi-sectoral DOHTs were trained and activated in Uganda. Assessment of their functionality in themes of multisectoral, coordination and One Health, cross-sectoral collaborations and zoonotic disease management a year later revealed above average competencies. Of the three themes, multisectoral, coordination and One Health had the highest average score. This could have been enabled by the leadership and multisectoral management modules during the DOHT trainings. Strong multi-sectoral coordination is vital for OH implementation in districts.



Poorly streamlined collaboration and communication among sectors including poor personal relations among staff within the sectors can affect effective coordination and commitment to OH (3).

There was information sharing mechanisms across sectors and with the NOHP. Also present were partner and other supportive mechanisms for OH activities which likely contributed to the notable achievements in OH reported by DOHTs. The DOHT trainings prior to activation placed emphasis on the role of information sharing as a tool for raising awareness on OH and soliciting for support. Although the benefits are clear, cross-sectoral collaborations and consensus building can be interfered by lack of approved mechanisms for sharing information across sectors and partners (3). Zoonotic disease management had the lowest score. Despite presence of surveillance systems and above average capabilities to detect and confirm priority zoonotic diseases, joint outbreak response was poor. Districts report delayed release of funds to support response to zoonotic diseases, likely made worse by lack of emergency funds at the affected districts. This results in slow response and demotivation of the players (3).

Conclusions and Recommendations

Development of OH training materials followed by targeted trainings of multi-sectoral personnel can provide the knowledge, skills and behaviors for effective performance of a district OH workforce. Integrating OH approaches at district level can improve multi-sectoral collaboration for zoonotic disease management. Government of Uganda can utilize this approach to expand OH implementation to all districts.

Acknowledgement

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Highlights from One Health Trainings on Antimicrobial Resistance in Masaka, Mbale and Soroti Districts, 2021

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¹Coalition for Health Promotion and Social Development

Introduction

AMR is a big global health threat that requires collective effort and action now. Coalition for Health Promotion and Social Development (HEPS-Uganda) and National One Health Platform trained 70 members of Masaka, Mbale, and Soroti District One Health teams (DOHTs) on Antimicrobial Resistance (AMR). During the trainings held between October – December 2021, DOHTs also reviewed the National AMR Plan and committed to cross-sectoral collaboration, joint planning, information sharing, and community sensitization on AMR.

The trainings are part of the Fleming Fund Country Grant Two project funded by Mott MacDonald through the Infectious Diseases Institute (IDI). The project targeting Gulu, Masaka, Lira, Arua, Soroti, Mbale, Jinja, Kabale and Mbarara districts, aims to avert health and economic burden of AMR in Uganda.

Misuse of antimicrobials still a concern

The DOHTs expressed concern over an increase in public self-medication especially during the current COVID-19 time. They note that this could exacerbate AMR if public awareness is not stepped up.



According to Ms. Faith Nakiyimba, Masaka District Health Officer (DHO), “People are mixing drugs due to little information on the dangers.” She also noted that drug stockouts in public health facilities contribute to the mixing of drugs and this is a key driver of AMR.

Stella Kisolo, the Mbale Assistant DHO observed that, “actions like self-medication, poor treatment adherence and use of human drugs in the animal sector are a threat to efforts against AMR. These practices must stop, lest we lose the AMR fight. Working together through the One Health approach is the way to go to achieve better results.”

Progress but additional effort needed

As the fight against AMR gathers pace in Uganda and worldwide, leaders and different stakeholders want to see more effort.

Masaka, District Veterinary Officer, Mukasa Kirumira called for additional efforts to strengthen the collaboration among different sectors in the district to tackle AMR and emerging diseases like COVID-19.



Figure 1: Participants during the AMR DOHT training

Recommendations

Control and regulation on the Uganda-Kenya border to reduce smuggling of sub-standard drugs which pose health risks increase drug resistance.

Involvement of political leaders in public mobilization and sensitization on self-medication, misuse of antibiotics, and mixing animal drugs.



Leverage civil society organizations like HEPS-Uganda for opportunities to increase AMR awareness, surveillance and stewardship.

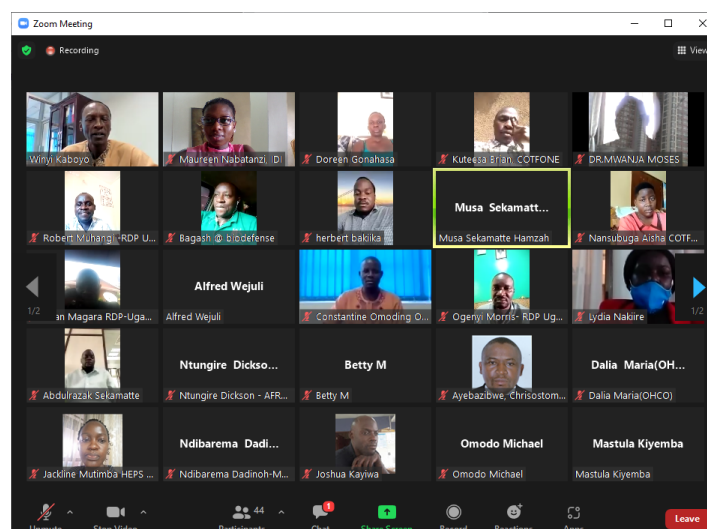
About HEPS Uganda

Initiated in 2000, HEPS Uganda promotes the rights of poor and vulnerable people with a special focus on health and socioeconomic rights.

Quarterly One Health Technical Working Group Meeting, December 2021

Editor

Every quarter, Uganda holds a One Health Technical Working Group (TWG) meeting. The TWG comprises of OH directors, partners and Cooperate Social Organizations under the National One Health Platform (NOHP) umbrella. Participants share progress on OH interventions, challenges arising and propose approaches to improve. The 4th quarterly meeting of 2021 was held on 21 December on Zoom; 44 participants attended.



Participants during the fourth OH TWG meeting

Highlights from the meeting

Interventions in AMR detection

Between 2020 - 2021, the Fleming Fund Project under the Infectious Diseases Institute supported processing of 5,072 priority samples from Regional Referral Hospitals, National Health Laboratory Services and Makerere and Mbarara University Laboratories.

One Health Assessment for Planning and Performance (OH-APPP)

Tackling Deadly Diseases And Pandemics (TDDAP)supported the NOHP to conduct the OH-APP during 22 - 23 November 2021. The OH-APP is a process that helps benchmark organizational capacity and performance of multi-sectoral coordination mechanisms. The process complements the WHO Joint External Evaluation. Findings will optimize implementation of the One Health approach in Uganda through improved prioritization, planning, stakeholder engagement, resource mobilization and data utilization for decision making.

Introducing 7-1-7 timeliness metrics

Resolve to Save Lives project under IDI is implementing a framework to evaluate system performance for detection, notification and response to public health events (PHE) including zoonoses. The framework sets 7 days to detect, 1 day to notify and 7 days to mount an effective response to PHE as targets.

7-1-7 provides targets that can be applied to all events and allows for standard comparison across countries. It presents an opportunity for Uganda to identify bottlenecks, enablers and improve performance.

Uganda Multi-Sectoral Self-Assessment, 2021

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Introduction

Uganda is one of 196 signatories of International Health Regulations (IHR 2005). This legally binding framework obligates countries to step up health security capacity to handle public health events and emergencies that have potential to cross borders. Uganda held a Joint External Evaluation (JEE) in 2017

to assess the IHR core capacities using the World Health Organization (WHO) IHR JEE tool. This led to development of a National Action Plan for Health Security (NAPHS) 2019-2023 to address the health security gaps.

Uganda continues to experience public health threats such as anthrax, cholera and viral haemorrhagic fevers like Ebola that threaten national and international trade, travel and economic development. In 2021, Uganda conducted an internal multi-sectoral self-assessment of current health security capacities. The objective was to evaluate progress towards attainment of capacities for health security.

Methodology

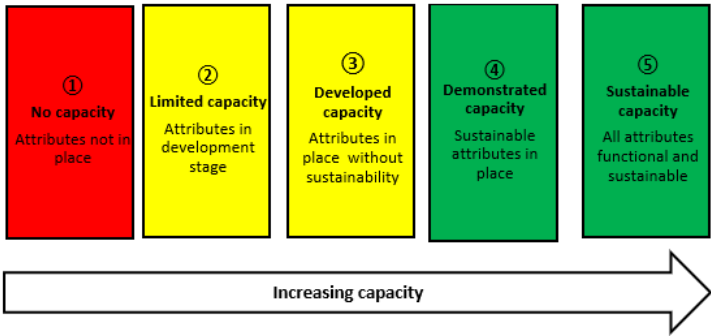
The assessment was led by the Office of the Prime Minister and Ministry of Health. The process started in April 2021 with consultation meetings and ended in October 2021 with dissemination of the multi-sectoral self-assessment and operational plan report (Figure 1).



Figure 1: Uganda multi-sectoral self-assessment process, Apr – Oct 2021



The WHO IHR JEE 2.0 tool was adopted. The tool consists of IHR competencies divided into 19 technical areas with 49 indicators. For each indicator, a colour code score was assigned to describe the level of health security capacity advancement using the following scale:



Results

In comparison to 2017 JEE, Uganda’s indicators with no capacity declined from 10% to 2% while those with limited capacity declined from 30% to 20%. Uganda had more indicators at sustained (2%), demonstrated (29%) and developed (47%) capacity in comparison to limited (20%) and no (2%) capacity (Table 1)

Table 1: Uganda’s health security scores in 2017 and 2021

Year	JEE, 2017		Self-assessment, 2021	
Capacity	Indicators	%	Indicators	%
1. No capacity	5	10	1	2
2. Limited capacity	15	30	10	20
3. Developed capacity	20	40	23	47
4. Demonstrated capacity	10	20	14	29
5. Sustainable capacity	0	0	1	2
Total	50	100%	49	100%

Participants developed an operational plan with 72 prioritized activities to step up health security capacity scores.

Conclusions and way forward

This interim assessment illustrated Uganda’s progress in health security capacities. In the next steps, government MDA will implement the priority activities in the operational plan to guide acceleration of capacity scores in Uganda.

Acknowledgements

This assessment involved whole Government of Uganda including: Office of the Prime Minister, Ministry of Health, Ministry of Agriculture, Animal Industries and Fisheries, Ministry of Water and Environment, Ministry of Defense and Veteran Affairs (Uganda People’s Defense Force), Ministry of Justice and Constitutional Affairs, Ministry of Science, Technology and Innovation, Uganda Wildlife Authority and Atomic Energy Council.

Partner organizations included: Infectious Diseases Institute, Resolve to Save Lives, US Centers for Disease Control and Prevention, World Health Organization, United States Agency for International Development, Makerere Univeristy School of Public Health, Makerere University Walter Reed Research Project, Food and Agriculture Organization, International Organization for Immigration, Baylor Uganda, MSF and UNICEF.

