

**GLOBAL HEALTH SECURITY AGENDA
INTERAGENCY ROADMAP UGANDA**

Version: September 1, 2015

Overview and Context

The purpose of this document is to develop an interagency roadmap for the Global Health Security Agenda (GHS) Phase One prioritized countries, including ongoing efforts to support of the 12 GHS targets through 2019 and by establishing robust systems and networks – well beyond that 2019 date. Organized by components under the Prevent, Detect, Respond framework, the Roadmap provides a snapshot of interagency activities planned to support GHS implementation in Uganda, and the prioritizing of those activities in Years One (FY 2015) to Five (FY 2019), consistent with the requirements, budget authorities, and missions of the U.S. government supporting departments and agencies (including HHS/CDC, DoD, DoS, USAID, USDA and FBI).

This will be a living document that will change over time to reflect shifts in priorities and/or resources. This template is designed as a resource for GHS planning and should ultimately be adapted as countries articulate how best to meet their needs for GHS planning and implementation. This document is intended to inform and complement annual country-specific work plans.

Other contextual issues that will be addressed in this roadmap, include:

- Relevant country history with GHS
- Presence and role of donors (U.S., others)
- Prior relevant policy and program efforts with IHRs and OIE/WAHIS reporting
- International Organizations' presence and programs
- Regional Organizations' presence and programs (e.g. African Union)
- Non-state organizations of relevance (e.g. Institute Pasteur)
- Other key issues and sensitivities

Elements of the GHS Roadmap

The document is organized by priority areas, under the Prevent, Detect, and Respond framework. Under each element, the first box of information contains the overarching GHS Goal, GHS Objective, and GHS target. The last section includes overarching, cross-cutting and/or regional priorities for Uganda.

Disclaimer

The information contained in this document is meant for planning and discussion purposes between the Government of Uganda, the United States Government and other GHSA partners. The 5-Year Roadmap does not in any way constitute a formal commitment on the part of the United States to fund this endeavor and that all USG foreign assistance is subject to availability of funds and appropriations by the Congress of the United States.

Global Health Security Agenda Overarching Activities

Within the context of Prevent/Detect/Respond, this overarching implementation roadmap should reflect by target the following:

- Host country's institutional structures and responsibilities, roles, responsibilities (*under host government activity*)
- Other donors' programs, support, etc. (*under Other activity*)
- Non state organizations' activities. (*under Other activity*)
- Coordination mechanisms

Prevent

Antimicrobial Resistance

GHSA Goal	GHSA Objective	GHSA 5-Year Target		
Prevent Avoidable Epidemics	Preventing the emergence and spread of antimicrobial drug resistant organisms and emerging zoonotic diseases and strengthening international regulatory frameworks governing food safety.	Support work being coordinated by WHO, FAO,OIE to develop an integrated and global package of activities to combat antimicrobial resistance, spanning human, animal, agricultural, food and environmental aspects (i.e. a one-health approach), including: a) each country has its own national comprehensive plan to combat antimicrobial resistance; b) strengthen surveillance and laboratory capacity at the national and international level following agreed international standards developed in the framework of the Global Action plan, considering existing standards and; c) improved conservation of existing treatments and collaboration to support the sustainable development of new antibiotics, alternative treatments, preventive measures and rapid, point-of-care diagnostics, including systems to preserve new antibiotics.		
	Key Milestones	US Government Activity	Government of Uganda Activity	Other Activity (e.g. NGO, other governments, multilaterals)
Year 1	<ol style="list-style-type: none"> 1. Completion of strategic plan, based on one health approach, to combat AMR by National stakeholders 2. Evidence that basic level diagnostic capability established at National Level Laboratory (most likely CPHL/NHL) 3. Veterinary laboratory action plan for AMR surveillance developed 	CDC: Technical assistance; placement of cooperative agreement with partner(s); equipment and supplies. USAID: Technical assistance DoD MUWRP: Technical assistance CBEP: technical assistance, laboratory BS&S training	Human resource expertise in planning Providing laboratory personnel and facilities.	To be determined
Year 2	<ol style="list-style-type: none"> 1. Demonstrated capacity to routinely detect AMR in humans at national level 2. Final report of National Laboratory Assessment for AMR completed 3. Establishment of twinning partner for AMR 	CDC: Technical assistance; assistance with determining twinning partner; equipment and supplies. USAID Technical assistance DoD MUWRP : Technical assistance CBEP: technical assistance, laboratory BS&S training	Human resource expertise in planning Providing laboratory personnel and facilities.	To be determined

Year 3	1.Demonstrated capability to detect AMR at central level National referral hospital 2. Final report detailing assessment of	CDC: technical assistance; cooperative agreement with partner(s); equipment and supplies. CBEP: technical assistance, laboratory BS&S training	Human resources for surveillance and guidelines development	To be determined
--------	--	---	---	------------------

	infection control in Uganda health system 3. Developed and disseminated guidelines for infection prevention, prudent use of antibiotics and infection management	USAID technical assistance.	Providing laboratory personnel and facilities.	To be determined
Year 4	1. Demonstrated timely recognition, diagnosis and timely reporting of AMR in humans. 2. Demonstrated laboratory capacity AMR in at least 2 subnational hospitals, including transportation and information reporting. 3. Demonstrated early-detection of MDR TB.	CDC: technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance CBEP: technical assistance, laboratory BS&S training	Providing laboratory personnel and facilities. Use of national health facilities to conduct surveillance and reporting	To be determined
Year 5	1. Preventing AMR spread by implementing multisectoral of Antimicrobial Stewardship Plan 2. Functional national multi-sector AMR surveillance system	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance CBEP: technical assistance, laboratory BS&S training	No current activities	To be determined

Zoonotic Diseases

GHSA Goal		GHSA Objective	GHSA 5-Year Target		
Prevent Avoidable Epidemics		Preventing the emergence and spread of antimicrobial drug resistant organisms and emerging zoonotic diseases and strengthening international regulatory frameworks governing food safety.	Adopted measured behaviors, policies and/or practices that minimize the spillover of zoonotic diseases from lower animals into human populations.		
	Key Milestones	US Government Activity	Government of Uganda Activity	Other Activity (e.g. NGO, other governments, multilaterals)	
Year 1	Demonstrated capability for identifying 2 of 5 priority zoonotic diseases in humans and 1 of 5 priority zoonotic diseases in animals	CDC: Technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID: Technical assistance	IDSR technical input	To be determined	
Year 2	1. Demonstrated capability for identifying 3 of 5 priority zoonotic diseases in humans and 2 of 5 priority zoonotic diseases in animals 2. Demonstrated shared network of reporting between animal and human health platform 3. Demonstrated evidence that veterinary and human health trainings incorporate One Health objectives 4. Official One Health platform formally established.	CDC: Technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID: Technical assistance DoD MUWRP: Technical assistance	IDSR personnel and integration of activities into work plans Technical assistance to develop the one health objectives and implementation	To be determined	
Year 3	1. Demonstrated capability for identifying 4 of 5 priority zoonotic diseases in humans and 3 of 5 priority zoonotic diseases in animals 2. Successful outbreak response (or drill) of	CDC: Technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID: Technical assistance:	Active participation in planning and carrying out activities and drills	To be determined	

	zoonotic disease incorporating wildlife, agriculture and human health personnel			
Year 4	<ol style="list-style-type: none"> 1. Established communication program for health care providers on zoonotic disease transmission and prevention 2. Demonstrated capability for identifying 5 of 5 priority zoonotic diseases in humans and 4 of 5 priority zoonotic diseases in animals 3. Three-year longitudinal study across wildlife, livestock, and at-risk human populations to identify pathways for disease emergence completed. 	<p>CDC: Technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID: Technical assistance DoD MUWRP: Technical assistance</p>	Increased personnel commitment for zoonotic disease prevention and control	To be determined
Year 5	<ol style="list-style-type: none"> 1. Demonstrated capability for identifying 5 of 5 priority zoonotic diseases in animals 2. Evidence of 25% percent reduction in the time from human outbreak onset to effective response. 3. Real-time surveillance/reporting system for veterinary diseases developed and functioning in 80% of districts 	<p>CDC: Technical assistance; write new FOA if funding continues. Close existing cooperative agreements. USAID: Technical assistance DoD MUWRP: Technical assistance</p>	No current activities	To be determined

Biosafety & Biosecurity

GHSA Goal		GHSA Objective		GHSA 5-Year Target	
Prevent Avoidable Epidemics		Promoting national biosafety and biosecurity systems.		A whole-of-government national biosafety and biosecurity system is in place, ensuring that especially dangerous pathogens are identified, held, secured and monitored in a minimal number of facilities according to best practices; biological risk management training and educational outreach are conducted to promote a shared culture of responsibility, reduce dual use risks, mitigate biological proliferation and deliberate use threats, and ensure safe transfer of biological agents; and country-specific biosafety and biosecurity legislation, laboratory licensing, and pathogen control measures are in place as appropriate.	
	Key Milestones	US Government Activity	Government of Uganda Activity	Other Activity (e.g. NGO, other governments, multilaterals)	
Year 1	1. Complete review of biosecurity bill by all ministries and relevant stakeholders.	CDC: Technical assistance; cooperative agreement with partner(s); equipment and supplies. Ambassador support for Biosecurity Bill. USAID: Technical assistance	Determine GOU competent authority for Biosecurity	To be determined	
Year 2	1. Biosecurity Bill legislation submitted to Parliament 2. All agents inventoried at BSL-3 laboratories and input into select agent database 3. Initiate inventory of select agents at all other laboratory facilities. 4. Approval of Biosecurity Bill legislation by Parliament	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. Ambassador support for Biosecurity Bill; USAID technical assistance. Support from DoD MUWRP CTR-CBEP	Provide legislative review and preparation for submission Provide personnel to participate in select agent inventory	To be determined	

Year 3	<ol style="list-style-type: none">1. Complete inventory of select agents at all other laboratory facilities.2. Licensing of identified facilities containing pathogen collections	CDC: Technical assistance; cooperative agreement with partner(s); equipment	Continue to provide personnel to complete select agent inventory	To be determined
--------	--	---	--	------------------

	<p>completed.</p> <p>3. Begin consolidation of pathogen collections into limited number of licensed facilities.</p> <p>4. Begin development of framework and authority for monitoring facilities containing pathogen collections</p>	<p>and supplies.</p> <p>Ambassador support / advocacy for Biosecurity Bill</p> <p>USAID: Technical assistance</p>	<p>Determine appropriate licensing body for facilities</p> <p>Provide expert review and assistance in framework development</p>	To be determined
Year 4	<p>1. Completion of Strategic Action Plan for biosafety and biosecurity</p> <p>2. Biosecurity and biosafety training developed and incorporated into pre-service university curricula.</p> <p>3. Complete consolidation of pathogen collections into limited number of licensed facilities.</p> <p>4. Finalize framework and authority for monitoring facilities containing pathogen collections</p>	<p>CDC: Technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID: Technical assistance</p> <p>Technical support from DoD CTR-CBEP</p>	<p>Contribute SME's in Law and science of Biosafety and Biosecurity for training and exercises</p> <p>Contribute to sensitization of the public about the laws of biosafety and biosecurity</p> <p>Participate in finalizing pathogen inventories and monitoring</p>	To be determined
Year 5	<p>1. Whole of government national biosafety and biosecurity system established</p> <p>2. National Biosafety and Biosecurity Plan approved and disseminated that categorizes risks among indigenous agents and provides guidance on best practices</p> <p>3. Complete audit of all activities mandated and implemented under the biosecurity bill.</p>	<p>CDC: Technical assistance; cooperative agreement with partner(s); equipment and supplies; write new FOAs if funding continues.</p> <p>USAID: Technical assistance</p> <p>DoD MUWRP: Technical</p>	No current activities	To be determined

Immunization

GHSA Goal		GHSA Objective		GHSA 5-Year Target	
Prevent Avoidable Epidemics		Reducing the number and magnitude of infectious disease outbreaks.		A functioning national vaccine delivery system – with nationwide reach, effective distributions, access for marginalized populations, adequate cold chain, and ongoing quality control – that is able to respond to new disease threats.	
	Key Milestones	US Government Activity	Government of Uganda Activity	Other Activity (e.g. NGO, other governments, multilaterals)	
Year 1	Establish agreement with the MoH and begin to address immunity gaps, with a focus on under-served populations	CCD technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance	No current activities	To be determined	
Year 2	<ol style="list-style-type: none"> 1. Cold chain maintenance training initiated, staffing levels increased, and with tool kits in 50% of districts 2. Vaccine coverage at national and sub-national levels documented through coverage surveys and sero-surveys where appropriate, with an initial focus on measles coverage 3. Strengthen AEFI (adverse events following immunization) surveillance and capacity to investigate and respond to AEFIs 	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance	<p>Provide health workers to carry out immunizations programs</p> <p>Provide power and other infrastructure for immunization programs</p>	To be determined	
Year 3	<ol style="list-style-type: none"> 1. Measles coverage $\geq 90\%$ at national level and in at least 80% of districts 2. 50% of trained Regional and District teams meeting $\geq 80\%$ of IDSR indicators 3. Cold chain maintenance training complete with tool kits in 100% of districts 4. Strengthen vaccine distribution to district level. 	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance	Provide personnel and commitments to increase demand for immunization services	To be determined	

Year 4	<p>1.Introduce second dose of Measles containing vaccine (MCV) 2.Safe injection practices established in all districts</p>	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance</p>	<p>Provide personnel and commitments to increase demand for immunization services</p>	<p>To be determined</p>
Year 5	<p>1.Cold chain functional and maintained in all trained districts 2.IDSR functional in ≥80% of Regions/Districts 3.Strengthened capacity (epidemiologic and laboratory such as through rapid sero-surveys) to monitor immune status of the population to identify areas with low coverage that may be vulnerable to outbreaks 4.Strengthened outbreak response immunization for measles and other epidemic prone VPDs</p>	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance</p>	<p>No current activities</p>	<p>To be determined</p>

Detect

Laboratory Systems

GHSA Goal	GHSA Objective	GHSA 5-Year Target		
Detect Threats Early	Developing and deploying novel diagnostics and strengthen laboratory systems.	Real-time biosurveillance with a national laboratory system and effective modern point-of-care and laboratory-based diagnostics.		
	Key Milestones	US Government Activity	Government of Uganda Activity	Other Activity (e.g. NGO, other governments, multilaterals)
Year 1	1. GHS principles integrated into Uganda National Health Laboratory Services Policy regarding laboratory services and workforce development for laboratory professionals 2. National human laboratories capacity mapped 3. Identify 2 IDSR priority diseases and available diagnostic tests for strengthening laboratory diagnostics at regional and national levels 4. Expand national sample transportation network 5. Identify site, establish plan for use of BSL-2 diagnostic lab under Ugandan Wildlife Authority (UWA) 6. Designs for renovations at UVRI, NADDEC, NaLiRRI, UVRI-Arua and Mbale facilities completed	CDC: Technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance DoD MUWRP: Technical assistance CBEP: technical assistance	Provide SMEs and technical assistance for development of National health Lab Services Policy Provide regional labs and hubs for network Assistance in managing national sample transportation network	To be determined

Year 2	<ol style="list-style-type: none"> 1. Diagnostic capacity established for most common (half of priority list), known IDSR diseases at national level 2. Exercise performed testing current transportation, reporting and laboratory systems 3. Evidence of distribution and validation of available rapid diagnostic tests and 4. Containerized BSL-2 lab procured and delivered to UWA site in Queen Elizabeth National Park 5. Renovations started at UVRI, NADDEC, NaLiRRI, UVRI-Arua and Mbale facilities 	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance CBEP: technical assistance</p>	<p>Carry out lab testing at national and district labs</p> <p>Continue maintenance of national lab sample transportation network</p> <p>Provide personnel to carry out</p>	To be determined
--------	--	---	--	------------------

	<p>equipment in regional and national laboratories</p> <p>4. Mapping of national laboratory capacity for animals</p>		national lab capacity assessments	
Year 3	<p>1. Establishment of technical capacities and communication of inter-sectorial laboratory services and established plan for surge capacity</p> <p>2. Established algorithms for central laboratory testing and plan for routing procurement of supplies and reagents</p> <p>3. Specimen transportation network functioning in at least 80% (72) of districts (112) for IDSR diseases</p> <p>4. Integration of veterinary and human health surveillance and report systems to promote one health and information sharing</p> <p>5. Complete stepwise accreditation at 2 regional labs and 3 central labs</p> <p>6. Evidence that central laboratories participate and pass external validation of testing</p> <p>7. Agreement between UWA, MoH and MAAIF developed for shared use of BSL-2 laboratory; plan for cooperative research projects established</p> <p>8. Renovations at UVRI, NADDEC, NaLiRRI, UVRI-Arua and Mbale facilities completed</p>	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies.</p> <p>USAID technical assistance</p> <p>CBEP: technical assistance</p>	<p>Promote and increase throughput for lab testing at national and regional labs</p> <p>Participate in accreditation process and assessments</p> <p>Central laboratories will increase competencies in order to pass external validation testing</p>	To be determined

Year 4	<p>1. Evidence of established diagnostic testing capacity for most common, known (3-4 from priority list) IDSR diseases at sub-national level locations</p> <p>2. Exercise performed testing current transportation, reporting and laboratory systems</p> <p>3. Evidence of diagnostic capacity for highest priority zoonotic diseases in animals</p> <p>4. Implement of cooperative research projects at UWA BSL-2 begins</p>	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance CBEP: technical assistance</p>	<p>Provide personnel for exercises and expertise in planning</p>	<p>To be determined</p>
Year 5	<p>Technically competent workforce and integration of laboratory training into University curriculum (e.g. beyond current integration only on veterinary)</p>	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. CBEP: technical assistance</p>	<p>No current activities</p>	<p>To be determined</p>

Surveillance Systems

GHSA Goal		GHSA Objective		GHSA 5-Year Target	
Detect Threats Early		Launching, strengthening and linking global networks for real-time biosurveillance.		Strengthened foundational indicator- and event-based surveillance systems that are able to detect events of significance for public health, animal health and health security; improved communication and collaboration across sectors and between sub-national, national and international levels of authority regarding surveillance of events of public health significance; improved country and regional capacity to analyze and link data from and between strengthened, real-time surveillance systems, including interoperable, interconnected electronic reporting systems. This can include epidemiologic, clinical, laboratory, environmental testing, product safety and quality, and bioinformatics data; and advancement in fulfilling the core capacity requirements for surveillance in accordance with the IHR and the OIE standards.	
	Key Milestones	US Government Activity	Government of Uganda Activity	Other Activity (e.g. NGO, other governments, multilaterals)	
Year 1	<ol style="list-style-type: none"> 1. Selection of 5 IDSR key diseases to perform enhanced surveillance 2. Establishment of second AFI study site for AFI project 3. DHIS-2 module created for communication of AFI data to MoH 4. Selection of 2 veterinary priority pathogens and perform enhanced surveillance activities 5. GEMP training and adaptation of USDA outbreak investigation manuals under FAO ECTAD completed 6. Complete assessment of electronic disease surveillance tools and ICT infrastructure in use across the country 	<p>CDC: Technical assistance; cooperative agreement with partner(s); equipment and supplies.</p> <p>USAID: Technical assistance</p> <p>DoD MUWRP: Technical assistance</p> <p>CBEP: technical assistance</p>	<p>Provide technical assistance for selection of priority pathogens</p> <p>Integrate enhanced surveillance into existing reporting activities and trainings</p>	To be determined	

<p>Year 2</p>	<ol style="list-style-type: none"> 1. Surveillance data reported from at least 80% (72) of districts (112) for IDSR diseases 2. Completed writing/approval of IDSR Strategic Implementation Plan and legal framework for disease surveillance by GoU 3. Establishment of third AFI study site for AFI project 4. Evidence of collaborative sharing of AFI data with MoH 5. Key recommendations on improvement of electronic disease surveillance system(s) developed by the Government of Uganda 	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID: Technical assistance DoD MUWRP: Technical assistance CBEP: technical assistance</p>	<p>Integration of priority pathogen surveillance and HMIS and data collection and analysis</p> <p>Provide surveillance guidelines to districts</p>	<p>To be determined</p>
---------------	---	---	--	-------------------------

Year 3	<ol style="list-style-type: none"> 1. Establishment of fourth AFI study site for AFI project 2. Evidence of collaborative sharing of AFI data with MoH 3. Mechanism established for rapid reporting of suspect zoonotic disease across wildlife, livestock, and human health systems. 	<p>CDC: Technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID: Technical assistance DoD MUWRP: Technical assistance CBEP: technical assistance</p>	<p>Provide technical assistance for carrying out surveillance activities</p> <p>Trainings on surveillance activities to ensure rapid reporting of priority pathogens.</p>	To be determined
Year 4	<ol style="list-style-type: none"> 1. Specimen transportation and DHIS-2 network functioning in at least 80% (72) of districts (112) for IDSR diseases 2. Evidence indicating that suspected outbreaks are notified to central level within two days of surpassing epidemic threshold 3. Establishment of fifth AFI study site for AFI project 4. Evidence of collaborative sharing of AFI data with MoH 	<p>CDC: Technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID: Technical assistance DoD MUWRP: Technical assistance CBEP: technical assistance</p>	<p>Participate in exercises and integrate lessons learned into trainings and technical assistance provided to districts</p> <p>Continue to build skills for epidemiologists at national and district level</p>	To be determined
Year 5	<ol style="list-style-type: none"> 1. Functioning surveillance system of three core syndromes indicative of public health emergencies 2. Sentinel surveillance data translated into regional surveillance policy and recommendations. 3. Evidence of collaborative sharing of AFI data with MoH 4. Official mechanism for communication and collaboration across sectors and between sub-national, national and international levels of authority regarding surveillance of events of public health significance established. 	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies; write new FOAs if needed. USAID technical assistance DoD MUWRP: Technical assistance</p>	No current activities	To be determined

Reporting

GHSA Goal		GHSA Objective	GHSA 5-Year Target		
Detect Threats Early		Strengthening the global norm of rapid, transparent reporting and sample sharing in the event of health emergencies of international concern.	Timely and accurate disease reporting according to WHO, OIE, and FAO requirements.		
	Key Milestones	US Government Activity	Government of Uganda Activity	Other Activity (e.g. NGO, other governments, multilaterals)	
Year 1	National framework for international reporting of animal diseases, including zoonotic disease	USAID: Technical assistance	No current activities	To be determined	
Year 2	Evidence that Uganda successfully and timely reported potential public health events of international concern to WHO and veterinary reporting systems, e.g. OIE in previous year	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance	Provide technical assistance and continue to enhance reporting mechanisms	To be determined	
Year 3	Evidence that Uganda successfully and timely reported potential public health events of international concern to WHO and veterinary reporting systems, e.g. OIE in previous year	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance	Provide technical assistance and continue to enhance reporting mechanisms	To be determined	
Year 4	Evidence that Uganda successfully and timely reported potential public health events of international concern to WHO and veterinary reporting systems, e.g. OIE in previous year	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance	Provide technical assistance and continue to enhance reporting mechanisms	To be determined	
Year 5	Evidence that Uganda successfully and timely reported potential public health events of international concern to WHO and veterinary reporting systems, e.g. OIE in previous year	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance	No current activities	To be determined	

Workforce Development

GHSA Goal		GHSA Objective		GHSA 5-Year Target	
Detect Threats Early		Training and deploying an effective biosurveillance workforce.		A workforce including physicians, veterinarians, biostatisticians, laboratory scientists, and at least 1 trained field epidemiologist per 200,000 population, who can systematically cooperate to meet relevant IHR and Performance of Veterinary Services (PVS) core competencies.	
	Key Milestones	US Government Activity	Government of Uganda Activity	Other Activity (e.g. NGO, other governments, multilaterals)	
Year 1	<ol style="list-style-type: none"> 1. FETP: The Public Health Fellowship Program – Field Epidemiology Track (PHFP-FET, i.e., Uganda FETP) is established and starts to respond to public health emergency events such as disease outbreaks. 2. System established for tracking trained individuals and capacities for zoonotic pathogen surveillance in both public health and animal health sectors. 3. Comprehensive PH workforce strategic plan completed. 4. First-year cohorts of national and district-level clinicians trained in EDP symptom recognition, PPE use and specimen handling 5. First-year cohort of district-level epidemiologists trained 	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies.</p> <p>USAID technical assistance</p> <p>DoD MUWRP: Technical assistance</p> <p>CBEP: technical assistance</p>	<p>Participate in training and identification of skilled PH workforce</p>	<p>To be determined</p>	

Year 2	<ol style="list-style-type: none"> 1. FETP: Exchange of information with partners occurs in forums such as the FETP Conference, international conferences, epidemiology bulletin, and peer-reviewed journals. PHFP-FET is expanded to include intermediate/basic tiers and other tracks (such as the Laboratory Systems Track) 2. Program to train public health veterinarians in place 3. Collaborative plan between Government and Universities for training current and future One Health workforce 4. Second-year cohorts of national and district-level clinicians trained in EDP symptom recognition, PPE use and specimen handling 5. Second-year cohort of district-level epidemiologists trained 	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance CBEP: technical assistance</p>	<p>Recruit, train and manage staffing levels of health workers and other necessary personnel</p>	<p>To be determined</p>
--------	--	---	--	-------------------------

	established.			
Year 3	<p>1. FETP: The first-cohort fellows are graduated, and placed in key posts in the Ministry of Health and/or National Institute of Public Health</p> <p>2. Curricula and course materials updated to include IHR, PVS, and OH core competencies in pre-service university education.</p> <p>4. Third-year cohorts of national and district-level clinicians trained in EDP symptom recognition, PPE use and specimen handling</p> <p>5. Third cohort of district-level epidemiologists trained</p>	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies.</p> <p>USAID technical assistance</p> <p>CBEP: technical assistance</p>	Recruit, train and manage staffing levels of health workers and other necessary personnel	To be determined
Year 4	<p>1. FETP: Regional and key district health officers and/or surveillance officers are trained in one of the three tiers of PHFP-FET.</p> <p>2. Rollout of OH Education across participating schools ongoing</p> <p>3. Animal and human health professionals provided in-service training in requisite one health skills</p>	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies.</p> <p>USAID technical assistance</p> <p>CBEP: technical assistance</p>	No current activities	To be determined
Year 5	<p>1. FETP: PHFP-FET becomes a permanent mechanism for training highly qualified public health workforce in Uganda.</p> <p>2. OH workforce has been trained in accordance with national OH disease prevention, detection, and response needs</p>	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies.</p> <p>USAID technical assistance</p> <p>CBEP: technical assistance</p>	No current activities	To be determined
Total Budget				

Respond

Emergency Management

GHSA Goal		GHSA Objective		GHSA 5-Year Target	
Respond Rapidly and Effectively		Developing an interconnected global network of EOCs and multi-sectoral response to biological incidents.		Every country will have a public health Emergency Operations Center (EOC) functioning according to minimum common standards; maintaining trained, functioning, multi-sectoral rapid response teams (RRTs) and “real-time” biosurveillance laboratory networks and information systems; and trained EOC staff capable of activating a coordinated emergency response within 120 minutes of the identification of a public health emergency.	
	Key Milestones	US Government Activity	Government of Uganda Activity	Other Activity (e.g. NGO, other governments, multilaterals)	
Year 1	<ol style="list-style-type: none"> Evidence of training of outbreak response and ICS at for district level rapid response teams Expansion of “real-time” biosurveillance online DHIS-2 to 10 IDSR priority diseases Multi-sectorial training completed on ICS to National Task Force for Epidemics. Evidence of integration of ICS and EOC functions into NTF Evidence Secure buy in at all levels of MoH and Multi sectorial NTF MoU between MoH, MAAIF and UWA regarding outbreak response 	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance DoD MUWRP: Technical assistance	Continue to provide technical expertise in incident management and maintenance of PHEOC Provide technical expertise for development of trainings and exercises for emergency management	To be determined	
Year 2	<ol style="list-style-type: none"> Exercise performed testing current transportation, reporting and laboratory systems and activation of and coordination of response by EOC NTF and key multi-sectorial staff (including EOC staff) trained on mid-level 	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance	Continue to train national and district staff on ICS and emergency management Provide key participation for EOC and IVCS exercises	To be determined	

	<p>ICS</p> <p>3. Core EOC contract staff receive intensive training on ICS including intensive immersion training at CDC EOC in Atlanta</p> <p>3. At least 25 districts RRT trained on ICS</p>		No current activities	To be determined
Year 3	<p>1. At least 60 total district RRTs trained on ICS</p> <p>2. Main national level surveillance and laboratory systems integrated in EOC systems</p> <p>3. Completion of national plans for response and recovery from public health priority threats exist (includes stockpile plan)</p> <p>4. Evidence of multi-sectoral collaboration in zoonotic outbreak response.</p> <p>5. Curricula and course materials updated to include emergency outbreak response roles and responsibilities in pre-service university education.</p> <p>6. PHEOC is an official office within MOH</p>	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance</p>	<p>Participate and provide personnel to train regional and national RRTs</p>	To be determined
Year 4	<p>1. Exercise performed testing current transportation, reporting and laboratory systems</p> <p>2. At least 90 total district RRTs trained on ICS</p> <p>3. All national level surveillance and laboratory reporting systems are interlinked into EOC system and provide timely information</p> <p>4. Joint information center established and fully functional</p>	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance</p>	<p>Participate and provide personnel and training for regional and national RRTs</p> <p>Continue to promote and train on ICS at national and district levels</p>	To be determined
Year 5	<p>1. Demonstrated ability to mount a response to a public health emergency in 120 minutes</p> <p>2. Permanent home for EOC established and EOC functioning in new space</p> <p>3. Capstone exercise completed testing all</p>	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance</p>	No current activities	To be determined

	developed EOC systems			
--	-----------------------	--	--	--

Linking PH and Law Enforcement

GHSA Goal		GHSA Objective	GHSA 5-Year Target	
Respond Rapidly and Effectively		Developing an interconnected global network of EOCs and multi-sectoral response to biological incidents: Promote establishment of public health EM programs, including EOCs; trained, functioning, multi-sectoral rapid response teams, with access to a real-time information system; and capacity to attribute the source of an outbreak.	In the event of a biological event of suspected or confirmed deliberate origin, a country will be able to conduct a rapid, multi-sectoral response, including the capacity to link public health and law enforcement, and to provide and/or request effective and timely international assistance, including to investigate alleged use events.	
	Key Milestones	US Government Activity	Government of Uganda Activity	Other Activity (e.g. NGO, other governments, multilaterals)
Year 1	<ol style="list-style-type: none"> Established lines of communication between public health and law enforcement (e.g. MoU, etc.) Joint public health / law enforcement training completed International Joint Investigation workshop held between USG, Ugandan and LH partners 	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance DoD MUWRP: Technical assistance CBEP: technical assistance	Provide technical experts from law enforcement to provide input into training and national plans	To be determined
Year 2	<ol style="list-style-type: none"> Completion of Joint Threat Assessment between public health and law enforcement Completion of joint protocol for joint investigation 	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance CBEP: technical assistance	No current activities	To be determined

Year 3	Multinational regional collaboration agreements for communication and response to biological events established	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance CBEP: technical assistance	Provide infrastructure at border points	To be determined
Year 4	1. Completion of formal exercise involving both public health staff,	CDC technical assistance; cooperative agreement CBEP: technical assistance	No current activities	To be determined

	<p>Office of Prime Minister, UPDF and law enforcement or real-life example of a joint investigation</p> <p>2. Core training curriculum for public health and law enforcement being implemented for new law enforcement officers.</p>	<p>with partner(s); equipment and supplies. USAID technical assistance</p>		
Year 5	<p>Completion of formal exercise involving both public health staff, Office of Prime Minister and law enforcement and focuses on borders and/or points of entry and includes POE staff</p>	<p>CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance</p>	No current activities	To be determined

MCM and Personnel Deployment

GHSA Goal		GHSA Objective	GHSA 5-Year Target	
Respond Rapidly and Effectively		Improving global access to medical and non-medical countermeasures during health emergencies.	A national framework for transferring (sending and receiving) medical countermeasures and public health and medical personnel among international partners during public health emergencies.	
	Key Milestones	US Government Activity	Government of Uganda Activity	Other Activity (e.g. NGO, other governments, multilaterals)
Year 1	<ol style="list-style-type: none"> Decision regarding placement of MCM and personnel activities and responsibility in the MoH or EOC SOPs for MCM and personnel deployment drafted. 	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance	Provide technical expertise for development of national MCM plans	To be determined
Year 2	<ol style="list-style-type: none"> Protocol or national framework completed for establishing criteria for sending and receiving personnel and or countermeasures to support a public health response Completion of SOPs and protocols for MCM and personnel deployment 	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance	Provide, procure, store and deliver national MCM	To be determined
Year 3	MCM stockpile formally established and pre-positioned	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance	Provide, procure, store and deliver national MCM	To be determined
Year 4	Exercise for deployment of MCM and personnel for PH emergency completed.	CDC technical assistance; cooperative agreement with partner(s); equipment and supplies. USAID technical assistance	Provide, procure, store and deliver national MCM	To be determined
Year 5	By year 5, at least one response to a public health emergency demonstrating	CDC technical assistance; cooperative agreement	No current activities	To be determined

	that Uganda sent and or received medical countermeasures or personnel to support response or a formal exercise demonstrating this capability	with partner(s); equipment and supplies. USAID technical assistance		
--	--	---	--	--

Summary of Overarching Priorities for 2015-2019

Uganda’s initial engagement with GHS started in 2013 GoU joined other countries with the same challenges to design interventions that we could quickly implement to boost our capacity to prevent, detect and respond and to assess whether these interventions, could be rolled out to the entire country based on existing platforms and capacities.

The MoH working with partners like the United States CDC, WHO, and others carried out a pilot project between March – September 2013, for upgrading capabilities in three areas namely,

- Establishing a network of laboratory diagnostic capacities,
- Strengthening real time surveillance and reporting
- Setting up of a Public Emergency Operations Centre (PHEOC).

The project used three indicator pathogens to demonstrate these capabilities. The indicator pathogens included Ebola, Cholera and Multi drug resistant Tuberculosis (MDR-TB). At the end of the pilot period, an external evaluation was conducted. The evaluation exercise highlighted successes in all the areas of focus. Currently, Uganda is building on the achievements of the demonstration project by gradually rolling out the GHSA activities to the whole country. These activities are also helping GoU to build the core capacities and accelerate the compliance to IHR (2005), which we hope will be attained by 2016.

Based on this successful demonstration pilot, in September 2014, Uganda agreed to carry out a self- assessment on the eleven GHSA action packages. This was done through a multi-disciplinary and multi-sectoral stakeholder process. Also, in line with the “One Health Approach”, the undertaking

involved national experts in various fields. A national consensus self-assessment report with a score of 60% was sent to the Global Health Security Steering Group for evaluation. Subsequently, in February 16 – 20, 2015, a team of external assessors from Finland, Kenya, the Kingdom of Saudi Arabia, USA, OIE, and Belgium visited Uganda and carried out an onsite independent assessment, where the Country's final score was 56%.

This exercise was very informative and identified the critical gaps in the three action package areas of Prevent, Detect and respond that need attention. GoU is committed to making improvements in all the action packages and as a way forward; we have initially prioritized the following action packages;

- Fully functionalize the Public Health Emergency Operations Center;
 - Strengthen real-time surveillance and reporting;
 - Biosafety and biosecurity,
 - Zoonotic diseases,
 - Strengthen Laboratory network and systems country wide, and
 - Link the law enforcement sub-sector with public health.
-