



Private Sector Partnership Addressing Emerging Zoonoses and Antimicrobial Resistance

Addendum 02 to the USAID Global Health Broad Agency Announcement for Research and Development (2018)

I. BACKGROUND

Emerging infectious diseases (EID) of pandemic potential, trans-boundary animal diseases of production significance, and the prospect of a post-antibiotic era are amongst today's defining global health security challenges. Transmissible between human and animal populations, zoonoses are emerging and expanding in geographic scope and incidence at an unprecedented pace, driven by land use change, agricultural intensification, population growth, shifting demographics, and increasingly globalized travel and trade. In parallel, the pace of reported antimicrobial resistance (AMR) in common pathogens is increasing, contributing to multi-drug resistant strains that challenge even last-line treatment options.

The public health, economic, and social impacts at stake are substantial. The influenza pandemic of 1918 was responsible for more than 50 million deaths globally. Recent modeling suggests that an influenza pandemic of similar severity, in the present context, carries a financial burden to the global economy of \$570 billion annually. Similarly, absent intervention, AMR-associated deaths are projected to soar from a current rate of 700,000 to over 10 million annually by 2050—more than that from cancer and diabetes combined. The World Bank estimates AMR-associated loss of global GDP in the range of 1.1 to 3.8% annually by 2050—up to 5% in low-income countries—and estimates an additional 28 million people will be forced into poverty, rolling back decades of development advancements in the world's most vulnerable populations and jeopardizing progress toward achieving the 2030 Agenda for Sustainable Development.¹ Even in the absence of pandemics, EID outbreaks and epidemics (e.g. MERS in South Korea in 2015; Ebola in West Africa in 2014) create country and regional disruptions that can affect the ability of both the public and private sectors to maintain and finance normal operations.

Trans-boundary animal diseases and non-zoonotic infectious disease of production significance represent additional threats, risking livestock-based livelihoods, food security and nutrition, and international trade and economic stability. Expanding incidence of trans-boundary animal diseases, such as African Swine Fever, illustrate the

¹ <https://sustainabledevelopment.un.org/>

magnitude of impact to local economies from international trade in live animals and animal products.

By 2100, the global population is projected to increase over 40% from a current population of 7.8 billion to 11 billion. Commensurate with expanding population is a substantial growth in demand for animal-source nutrition. In South Asia alone, demand for poultry between 2000 and 2030 is slated to increase 725%. Similarly, aquatic animal production has experienced double-digit growth in recent years, and nearly half of the world's fisheries production is now farmed. Meeting this demand through an accelerated transition to low-risk animal source nutrition production systems and sustainable intensification will be paramount. Surging population growth, animal production trends, and associated planetary impacts threaten an increasingly volatile and dynamic emerging disease landscape within this century. There is increasing recognition that practices that promote improvements in animal health, as reflected in lower risk for zoonotic disease and AMR, are also consistent with promoting improved public health. The private sector and industry remain central constituencies in shaping the growth of animal-source nutrition production, and in generating solutions to these defining global health security challenges.

For over 15 years, USAID has worked with a range of public, non-governmental, and private sector partners in over 30 countries to foster multi-sectoral coordination and strengthen capacities to address infectious disease threats. This Addendum will build upon that robust foundation, contributing new approaches to pre-empt the emergence, and mitigate the impact from, emerging infectious disease and AMR threats. Refer to Annex 1 for a summary of USAID's Emerging Threats Division and Global Health Security Agenda programming.

Challenge Statement:

The challenge is to develop and implement innovative, market-driven, and sustainable research and development (R&D) solutions that substantially advance progress in achieving both increasing global access to safe, affordable, high quality animal-source nutrition and global health security through prevention of emerging zoonoses, trans-boundary animal diseases, and AMR. Solutions should focus on the nexus between public and private sector collaboration, and should add value to existing—or develop new—approaches that are beyond the capacity of the public sector to achieve independently. Solutions should further account for trends, policy environments, and capacities that differ geographically, where relevant, while exploiting approaches with potential for wide scale applicability.

II. SOLUTIONS SOUGHT

This Addendum seeks, through co-creation, to build new partnerships and leverage the unique expertise, positioning, and commitments of the private sector as change agents in

developing innovative solutions to preventing and mitigating the risk from emerging zoonoses, trans-boundary animal diseases, and AMR. Solutions should facilitate institutionalizing lowest-risk, market-driven, animal-source nutrition production and marketing. USAID seeks solutions that will address some or all of the following priority challenges and research questions:

- What specific approaches will enhance stewardship² of antimicrobial usage in terrestrial and aquatic animal production?
- What strategies can reasonably be expected to improve compliance with harmonized, evidence-based policies governing antimicrobial usage in animal production, and will bridge the gap between legislation and regulation?
- What is needed to drive animal production husbandry and management shifts to emerging infectious disease and antimicrobial resistance low-risk practices at scale? What are the specific tools, instruments, package of services, partnerships or policy structures that have shown promise in other contexts, and could be adapted to catalyze shifts to low-risk animal and animal-source nutrition production?
 - How are the identified interventions grounded in sound economic analyses, demonstrating sustainability independent of external resourcing?
 - What specific animal production value chain(s) and production system(s) should be prioritized for the identified intervention? How is the intervention applicable equitably across both domestic and export-oriented production?
 - What role could novel incentivization schemes and financing mechanisms play in enhancing adoption of the identified interventions?
- What specific, essential gaps in data and analyses remain obstacles to institutionalizing risk-mitigative interventions, and what approaches will efficiently leverage disparate streams of existing data and build the requisite evidence base toward promoting actionable interventions?
- What tools, processes and interventions are needed in developing data-driven, risk-based approaches to disrupting emerging infectious disease pathways at the human-animal-environment interface?
- What technologies are likely to provide early identification of epidemic/pandemic prone events and enable actionable pre-emergence interventions?

This is an illustrative list, and is not intended to be exhaustive. It is meant to give offerors a sense of the scale of approaches we are interested in testing and the level of investment

² OIE guidelines (Section 6 of the terrestrial and aquatic animal health codes) can be accessed online:

http://www.oie.int/index.php?id=169&L=0&htmfile=titre_1.6.htm and
http://www.oie.int/index.php?id=171&L=0&htmfile=titre_1.6.htm

The GHSA/JEE AMR action package benchmarks and definitions can be accessed online:

<http://apps.who.int/iris/bitstream/handle/10665/259961/9789241550222-eng.pdf;jsessionid=E1792BAD90B265FF91B6F1532C9284FC?sequence=1>

for those approaches. Solutions to identified challenges that fall outside of those listed above are encouraged.

What we are looking for:

- Specific interventions, clearly articulated, and deployable within the first 6 months of implementation;
- Technically sound interventions that identify expected implementation challenges, and demonstrate solutions to bridge those challenges;
- Interventions targeted to value chains of greatest production significance in the identified geography;
- Interventions that are market-driven, cost-effective, and sustainable independent of external resourcing;
- Interventions that are scalable, ideally across value chains, production contexts and diverse low- and middle-income country geographies.

What we are NOT looking for:

- Interventions which do not clearly articulate a pathway to adoption;
- Basic research, defined as research directed towards fuller knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind;
- Research toward vaccine or pharmaceutical product development

USAID and its partners seek both innovators with novel solutions and resource partners with the ability to test and scale innovations. We are particularly interested in partners with, but not limited to, the following capabilities:

- Demonstrated capacity and willingness to partner with local institutions to co-create and test solutions;
- Ability and willingness to partner, including across stakeholders from diverse sectors, to deploy identified solutions;
- Unique positioning, access, and influence across partners and relevant industries to lead the development, validation, and potential to scale identified solutions;
- A proven record of developing and executing multi-sectoral health development solutions

III. ELIGIBILITY TO APPLY

Private sector entities are encouraged to apply. The private sector is defined as for-profit entities at the local, national or multinational level, and refers to the following organizations and actors:

- Private for-profit entities, such as a business, corporation, or private firms
- Private equity or private financial institutions, including private investment firms, mutual funds or insurance companies

- Private business or industry associations, including but not limited to chambers of commerce, industry associations and related types of entities
- Private grant-making foundations or philanthropic entities
- For-profit approaches that generate sustainable income (*e.g.*, a venture fund run by a non-governmental organization (NGO) or a social enterprise).

Other types of organizations that can catalyze the work of private sector entities are also encouraged to apply. These include but are not limited to non-profits, social enterprises, universities, institutions of higher education, and research institutes. All organizations must be formed and legally incorporated, have the capacity to successfully execute the activities in their respective areas of expertise, and be capable of receiving and administering award funding. While partnership with the private sector is not required, it is strongly preferred.

Organizations or consortia submitting an Expression of Interest with experience working in the U.S. government's GHSA priority countries in Africa and/or Asia are strongly preferred (refer to Annex 1 for the complete list of countries where USAID's Emerging Threats Division currently operates).

IV. INSTRUCTIONS FOR SUBMITTING EXPRESSIONS OF INTEREST

USAID will review Expressions of Interest (EOI) in accordance with the instructions and evaluation criteria set forth in this Addendum. USAID will accept up to two EOIs from a single organization.

EOI must indicate the development approach(es) that will deliver potential solutions to the priority challenge stated in Section II. Organizations are encouraged to collaborate with peer organizations that bring differing perspectives and/or comparative advantages. Organizations are also encouraged to think through innovative cost-sharing arrangements. USAID is supportive of approaches that value collaboration as a component of the co-creation and co-resourcing process.

A. General Instructions for the EOI

EOIs must be submitted in accordance with the following:

1. If a respondent does not follow the instructions set forth herein, the respondent's EOI may be eliminated from further consideration.
2. USAID will not pay for any EOI preparation costs.
3. EOIs must be submitted in English.
4. All EOIs submitted in response to this Addendum are due no later than the closing

date and time indicated in this Addendum.

5. EOIs submitted in response to this Addendum will be received by electronic submission only. Facsimile or hardcopy submissions will not be accepted.
6. EOIs must be emailed to ETDPrivateSectorBAA@usaid.gov.
7. The EOI must not exceed five (5) pages in length, excluding cover page. EOIs longer than five (5) pages will not be considered.
8. Respondents must use 8.5 by 11 inch (or A4) paper, single spaced, Times New Roman 12 point font, and have margins no less than one inch on the top, bottom, and both sides. Number each page consecutively.
9. The EOI must be in .pdf or .docx format
10. The EOI must contain a cover page with the following information:
 - Title: BAA for Private Sector Partnership Addressing Emerging Zoonoses and Antimicrobial Resistance (Addendum #2 to the USAID Global Health Broad Agency Announcement for Research and Development)
 - BAA Number: GLOBALHEALTH-BAA-2018/Addendum #2
 - Name of the respondent:
 - Respondent contact person, address, telephone number, and email address
11. Questions in regard to the BAA must be submitted via email only to the ETDPrivateSectorBAA@usaid.gov. Questions must be submitted by **May 22, 2019 at 5:00 PM** Eastern Standard Time.
12. EOIs must be submitted by **June 24, 2019 at 5:00 PM** Eastern Standard Time. The subject line of the email must contain “GLOBALHEALTH-BAA-2018/Addendum #2” and the name of the respondent.

B. Content of the EOI

1. Provide a brief description of your proposed intervention/approach as it applies to Section II of this Addendum. Be sure to address:
 - How your approach will specifically address the Problem and Challenges statements identified.
 - How the proposed approach has the potential to be a cost-effective, scalable, and sustainable endeavor? Please explicitly provide economic analyses for the proposed interventions (e.g. return on investment; rate of return; net present value) using a set of assumed parameters.
 - Demonstrate specifically how you will implement your intervention or approach, and address any policy, regulatory, or other identified challenges?

- How you will undertake implementation research—if needed—to answer questions of feasibility, acceptability, scalability and/or costs?
 - What you expect to gain from the co-creation process in terms of partnerships that would continue to build upon your intervention/approach.
2. Provide a brief description of your organization’s experience or expertise in the intervention/approach you are proposing. Address your ability to harness the comparative advantages of other parties and collaborate with other actors, including across a diverse set of multi-sectoral stakeholders who may be critical to implementing identified solutions. Please indicate specific relationships with private sector actors, and any pre-existing partnership commitments.
 3. Provide the approximate duration and target location(s) of your proposed intervention/approach. Note that the EOI should identify one or more specific countries or regional or global approaches identified within the U.S. Government’s support under the Global Health Security Agenda (Annex 1). If the proposed intervention falls outside of these geographic parameters, it may be considered, but must be aligned to a particular evidence-based geographic risk analysis identified in the proposal.
 4. Provide names of up to two (2) individuals nominated to participate in the Concept Paper workshop, as described in this Addendum. Briefly describe why the individuals you are nominating are the best people to co-create promising approaches to preventing and mitigating risk from emerging zoonoses and AMR alongside USAID staff and other organizations. **Note: Individuals whose focus is on business development for the respondent organization will not be considered for participation in the workshop. USAID reserves the right to disapprove nominated individuals and request additional/different nominations at its discretion.**
 5. Co-financing and co-investment is not required, but is strongly encouraged. Please specify if the applicant is able to provide financial and/or in-kind contributions, and outline the nature of that contribution.

V. EVALUATION CRITERIA

USAID will review EOIs in accordance with the instructions and evaluation criteria set forth in this Addendum.

Criterion 1: Intervention/Approach

- Does the proposed intervention/approach introduce an evidence-based solution, leveraging private sector and industry equities, to preventing and mitigating risk from emerging zoonoses, trans-boundary animal disease, and AMR?
- Is the proposed intervention/approach technically sound, grounded in evidence,

and responsive to identified challenges present in the countries and sectors targeted for implementation?

- Does the proposed intervention or approach demonstrate that it will have a significant, sustainable and measurable impact in addressing the challenges articulated in Section II?

Criterion 2: Partnership Expectations and Values

- What strengths does the applicant's organization bring as a partner? Does the applicant have the ability to make unique contributions to preventive and mitigative approaches to emerging zoonoses, trans-boundary animal disease, and AMR?
- What experience does the applicant's organization have in building unique partnerships, including with private sector actors to address emerging zoonoses, trans-boundary animal disease, and AMR?

Criterion 3: Cost considerations

- Does the proposed approach have potential to be a cost-effective, scalable, and sustainable endeavor, as demonstrated, in part, through economic analyses?

Criterion 4: Ability to Participate in Co-creation

- Does the respondent have the ability to provide the participation of up to two (2) technically experienced individuals³ in the co-creation workshop in September 2019? **Note: It is essential that the participants nominated will be able to participate in the workshop full time. USAID will not pay for travel costs for participants.**

Criterion 5: Diversity of Perspectives and Capabilities

USAID seeks to bring together a diverse set of co-creators in collaboration in order to enable broader thinking and innovation. The selection of EOIs will be in line with the goal of achieving this diversity.

- Does the approach demonstrate experience working in similar low and middle income country contexts, including explanation of prior experience partnering with private sector organizations in Africa and/or Asia? Does the EOI incorporate local expertise in Africa and/or Asia?
- Does the EOI reflect diverse perspectives, solutions and financing models?
- Do the applicants have experience within the past five years of working in the emerging zoonoses and/or AMR arenas?

VI. SELECTION PROCESS, TIMING AND EXPECTATIONS

³ USAID is looking for subject matter experts who can speak in depth regarding the ideas proposed in the EOI as well as contribute to solutions and partnership-building relating to the challenges presented in this BAA.

USAID will review and select EOIs submitted in accordance with the guidelines and criteria set forth in this Addendum. USAID reserves the right to disregard any EOIs that do not meet the requirements. All applicants may not progress to the proceeding stages.

Stage 1 (Posting BAA Announcement/Receiving EOIs):

- Organizations will submit their EOIs by the due date stated in Section IV of this Addendum. All potential partners may not move forward to Stage 2.
- For EOIs that are deemed by USAID to have merit to continue Stage 2, USAID will issue an invitation to the potential partner(s) to attend a three to four day co-creation workshop meeting to be held in September 2019. At the discretion of USAID, up to two co-creation workshops will be held in Europe or Asia to maximize participation from local partners.

Note: USAID will make every effort to provide as much advance notice as possible regarding the confirmed workshop location and any change in the meeting dates, as well as further information with regard to the BAA process.

Stage 2 (Co-Creation and Development of the Concept Paper):

- Selected applicants will discuss their EOIs and further develop their concept with USAID and its partners at a co-creation workshop. Working together, USAID and the potential partner(s) will collaborate on a Concept Paper(s). It is during this phase of co-creation or co-design that the parties will begin to determine the need for additional partners and resources to complement the project. **All potential partners may not move forward to Stage 3.**
- The Concept Paper, generally 5-10 pages in length, will further detail and explain the project as it evolves during the co-design process. The Concept Paper will outline a concrete programmatic plan, including goals, methodology, focus areas, monitoring and evaluation, sustainability, gender considerations, timelines, personnel, and budget.

Stage 3 (Peer and Scientific Review Board):

- Concept papers submitted to USAID will be reviewed by the Peer and Scientific Review Board for selection. Approved concept papers will proceed to an award process. **Further participation in subsequent stages of co-creation and award is not guaranteed by virtue of participating in previous stages, and all potential partners may not move forward to Stage 4.**

Stage 4 (Determination and Award):

Organizations will be notified if a concept will be funded at this stage after review.

USAID intends to select apparently successful partners as soon as possible within Quarter 2 of fiscal year 2020. Awards are planned to be in the range of \$30-40 million USD over a 5-year period. This is an illustrative range, and the award size will ultimately depend on the scope of the concept and number of awards made. Note that this is only an estimated

range, and the amounts could be smaller or greater depending on the concept.

USAID is not obligated to issue a financial instrument or award as a result of this Addendum. Any award is subject to the availability of funding, and issued at the discretion of the United States government.

Primary Point of Contact: ETDPrivateSectorBAA@usaid.gov

VII. Information Protection

USAID's goal is to facilitate the research that is required to lead innovative, and potentially commercially viable, solutions. Understanding the sensitive nature of submitters' information, USAID will work with organizations to protect intellectual property.

EOIs should be free of any intellectual property that the submitter wishes to protect, as the EOIs will be shared with USAID partners as part of the selection process. However, once submitters have been invited to engage in further discussions, submitters will work with USAID to identify proprietary information that requires protection.

Therefore, organizations making submissions under this Addendum hereby grant USAID a royalty-free, non-exclusive, and irrevocable right to use, disclose, reproduce, and prepare derivative works, and to have or permit others to do so to any information contained in the EOIs submitted under this Addendum. If USAID engages with the organization regarding its submission, the parties can negotiate further intellectual property protection for the organization's intellectual property. Organizations must ensure that any submissions under this Addendum are free of any third-party proprietary data rights that would impact the license granted to USAID herein. This Addendum falls under the USAID Global Health Broad Agency Announcement for Research and Development (2018).

EOIs must include all required information. Only complete EOIs will be considered by the Review Committee.

USAID may, at any time and at its sole discretion, modify eligibility criteria with respect to individual applicants, and/or Project Leads, to the extent that such modifications do not materially undermine the review process.

All terms and conditions set forth in the BAA are applicable to this Addendum.

Attachment:

Annex 1: Evolution of the USAID's Emerging Threats Division programming – A decade of learning and adapting

Annex 1: Evolution of Emerging Threats Programming: A Decade of Learning and Adapting

For over 15 years, USAID has been a major leader in the global response to the dangers posed by emerging pandemic threats and has invested in programs with the dual goals of minimizing the impact of existing pandemic influenza threats, particularly from the highly pathogenic H5N1 avian influenza, and pre-empting the emergence and spread of novel pandemic and epidemic threats. The approach for achieving these goals was built around a suite of investments and targeted partnerships designed to give earlier insight into the emergence of new public health threats and enhance country-level capacities to mitigate their potential impact. The guiding principles for the Emerging Pandemic Threats (EPT) program have been to:

- build on the understanding that the future well-being of humans, animals, and the environment are inextricably linked, a concept known as One Health;
- promote a “One Health” approach that spans the animal health, public health, environmental, and conservation communities;
- target promotion of policies and strengthening of skills and capacities critical for both minimizing the risk of new disease emergence and the ability to limit their social, economic, and public health impact; and
- use a risk-based approach to target investments where the likelihood of disease emergence is greatest.

EPT-1 (2009-2014): The first iteration of EPT complemented a One Health line of work supported by USAID since 2005 aimed at addressing the threat posed by highly pathogenic H5N1 avian influenza (AI). The EPT and AI portfolios were focused on building the capacities and evidence base needed to mitigate the impact of novel “high-consequence pathogens” arising from animals. Specifically, the EPT-1 portfolio consisted of four complementary activities, including strategic partnerships with the Food and Agricultural Organization of the United Nations (FAO) and World Health Organization (WHO) and was implemented in more than 20 countries across Africa, Asia, and Latin America:

- **PREDICT-1**: Focused on building a global early warning system for the emergence of diseases that move between wildlife and people, primarily through detection, and discovery of microbes at the wildlife-human interface.
- **PREVENT**: Aimed at characterizing risks associated with practices and behaviors that facilitate disease transmission between animals and people, and developing strategies for lowering the risk of disease spillover.
- **IDENTIFY**: A partnership between WHO, FAO, and the World Organisation for Animal Health (OIE), focused on strengthening laboratory capacities to safely diagnose and report priority animal and human pathogens.
- **RESPOND**: Focused on the central role of local universities to train professional cadres of “future leaders” responsible for supporting, promoting, and implementing the One Health approach.

EPT-2 (2014-2019): The second and current iteration of EPT builds on the investments, partnerships, and lessons from EPT-1. The focus remains on preventing, detecting, and responding to emerging viral diseases using a One Health approach, but broadens investments

around preparedness. The scope of the program also was expanded to address the threats posed by antimicrobial resistance (AMR), as the inappropriate use of antibiotics in animal husbandry and inappropriate “prescriber-user” practices associated with antibiotic use in clinical care were increasingly understood to be core drivers behind the emergence and global spread of antibiotic-resistant organisms. EPT-2 currently works in more than 30 countries across Africa, Asia, and the Middle East, and is comprised of three activities as well as partnerships FAO,WHO, and IFRC:

- **PREDICT-2**: Consolidated the scopes of EPT-1’s PREDICT-1 and PREVENT to more-precisely identify and characterize the zoonotic viruses in animals and people, as well as behaviors, practices, and conditions associated with viral evolution, spillover, amplification, and spread.
- **Preparedness and Response (P&R)**: Assists countries in establishing and strengthening national One Health platforms to develop and maintain multisectoral collaboration, and develop plans for responding to public health events of unknown etiology.
- **One Health Workforce (OHW)**: Focuses on building on the investments of EPT-1’s RESPOND by strengthening One Health university networks to address the workforce needs of national ministries, the private sector, and the NGO sector, as well as focus on strengthening the operational capacities of the university networks.
- **FAO**: Focuses on activities to understand biological drivers of zoonotic virus spillover, amplification, and spread (risk characterization); promote policies and practices that reduce the risk of, spillover, amplification, and spread (risk mitigation); support national One Health platforms; strengthening national preparedness to respond to events of public health concern; and strengthening global surveillance networks.
- **WHO**: Focuses on strengthening surveillance, particularly in supporting a global database of respiratory pathogens; strengthening national preparedness to respond to events of public health significance; supporting One Health national platforms; and, investing in a One Health workforce.
- **IFRC**: Focuses on building preparedness through development/updating of preparedness and response plans, community-based surveillance for both human and animal health events, epidemic control for volunteers and community members, social and ecological risk mapping, local private sector engagement, risk communication and social mobilization.

Global Health Security Agenda (GHSA): In 2014, USAID joined other USG partners, including the National Security Council, Department of State, the Centers for Disease Control and Prevention (CDC), and the Department of Defense, in implementing the GHSA. At the core of both EPT-2 and GHSA is the goal of strengthening capacities for prevention, detection, and response for infectious disease outbreaks using a multisectoral approach that fosters collaboration across public health, medicine, agriculture, animal/veterinary health, environment, education/academia, and defense/security agencies. Additional information can be found on <https://www.ghsagenda.org/>

The Legacy of Emerging Threats Programming - Results and Impact

EPT implementing partners and staff have been working with governments, in-country stakeholders, and regional and international partners to strengthen country-level capacities to

enhance understanding of viral distribution and key drivers of disease emergence, from deforestation and land use change, to wildlife trade and livestock product demands. This information, along with other EPT investments to strengthen country-level capacities for routine infectious disease detection and outbreak response, are being used to improve surveillance, response, and risk-mitigation strategies. Over its lifespan, EPT programming has made a positive impact across more than 30 countries (complete list included on pg. 4).

PREPARE:

- National One Health platforms (NOHPs) – formal groups of technical and administrative representatives from a broad range of sectors – have been established in 16 countries. This normative collaboration and coordination prepares countries to implement multisectoral responses during outbreaks or public health emergencies.
- Sixteen countries across Asia and Africa have developed or updated their national preparedness and response plans for emerging threats, and 12 countries have tested their plans via simulations and exercises.
- More than 170,000 units of personal protective equipment have been stockpiled and are available to deploy for outbreak responses.

PREVENT:

- EPT partners have conducted rigorous data collection, analysis, and risk forecasting to significantly refine our understanding of the “drivers” that underlie viral spillover, amplification, and spread. Using these virologic, behavioral, ecologic, and epidemiologic data, over 40 new risk factors have been identified for targeting surveillance, risk mitigation, and policy efforts.
- Twelve countries have implemented or expanded their risk mitigation efforts, including improved vaccination, strengthened biosafety and biosecurity procedures, and improved hygiene practices.
- USAID’s Avian Influenza efforts have contributed to dramatic downturns in poultry outbreaks and human infections and a significant reduction in the number of countries affected; with five of these countries (Indonesia, Vietnam, China, Bangladesh, and Egypt) as the primary reservoir of the virus.

DETECT:

- More than 60 laboratories across 27 countries have been strengthened and are able to test for viruses from high-consequence viral families in a safe and quality-assured manner.
- Approximately 1,000 unique viruses from viral families that have caused epidemics in the past have been identified and assessed for their risk to humans. This constitutes the most comprehensive viral detection and discovery effort to date.
- A tool to perform comprehensive assessments of capacity and to target improvements in animal laboratory systems, FAO’s Laboratory Mapping Tool, has been developed. Thus far, a total of 121 assessments (initial and follow-up) have been conducted in 76 veterinary laboratories across 22 countries.

RESPOND:

- Since 2005, USAID has strengthened the capacities of more than 50 countries to monitor the spread of H5N1 avian influenza among wild bird populations, domestic poultry, and

humans, to mount a rapid and effective containment of the virus when it is found, and to help countries prepare operational capacities in the event that a pandemic capable virus emerges.

- EPT partners have supported more than 200 outbreak responses, including distributing more than 25,000 units of personal protective equipment, providing laboratory support (including materials and testing), and providing technical assistance to county teams to conduct outbreak investigations.

List of Countries where USAID currently has Global Health Security and Emerging Threats programming

Africa

Ethiopia*
Kenya*
Tanzania*
Uganda*
Burkina Faso*
Cameroon*
Cote d'Ivoire*
Guinea*
Liberia*
Mali*
Senegal*
Sierra Leone*
Democratic Republic of Congo
Republic of Congo
Rwanda
Ghana

Asia

Bangladesh*
India*
Indonesia*
Vietnam*
Thailand
Cambodia
Laos
Malaysia
Mongolia
China
Nepal
Myanmar

Middle East

Egypt
Jordan

**Countries are the U.S. government's Global Health Security Agenda Phase I priority countries.*