# Joint Testimony of the U.S. Agency for International Development Dirk Dijkerman, Executive Coordinator, USAID Ebola Task Force Jeremy Konyndyk, Director, Office of U.S. Foreign Disaster Assistance Subcommittee on State, Foreign Operations, Committee on Appropriations U.S. House of Representatives February 11, 2015

Thank you, Chairwoman Granger, Ranking Member Lowey, and Members of the Subcommittee for the opportunity to update you on the ongoing U.S. response to the Ebola epidemic in West Africa and our strategy moving forward.

To date, this unprecedented outbreak has infected over 22,000 people, claimed almost 9,000 lives, decimated national health systems, stalled economies, and brought the Ebola virus to our shores for the first time in history.

In response, USAID has helped galvanize a successful, multi-pronged effort that has saved lives and helped to isolate the disease in the three affected countries – though the fight is far from over. In September, the World Health Organization reported over 350 new cases per week in Liberia and that figure has now dropped to an average of five new cases per week. In Sierra Leone, the epidemic peaked with 550 new cases per week in November, and the latest statistics show 80 new cases per week. In Guinea, the epidemic peaked at more than 170 new cases per week in December and current cases are under 50 per week in recent weeks. To date, there are well over 10,000 USAID-supported humanitarian partner staff have been activated across the region and the U.S. has provided over \$939 million to fight Ebola at its source. As of the end of January, the USG has obligated more than \$1.1 billion to the Ebola response efforts both domestically and internationally.

This would not have been possible without this Subcommittee's leadership in passing the FY 2015 emergency funding for Ebola. This critical funding has enabled USAID to mount an aggressive and flexible response. As a result, USAID has not included any Ebola-specific funding in the FY 2016 budget request.

USAID has led a whole-of- government response to this crisis, in partnership with numerous NGOs and private organizations, such as the Paul G. Allen Family Foundation, Facebook founder Mark Zuckerberg, the Bill and Melinda Gates Foundation, and countless private sector companies. The government's strategy applies evidence, science, and innovation, while leveraging the expertise and abilities of multiple U.S. departments and agencies. These efforts have helped to mobilize healthcare professionals, the private sector, and other donors, and together we have succeeded in stopping the exponential growth of the virus in West Africa and averting the dire scenarios of hundreds of thousands of cases that were projected last fall.

Previous outbreaks of Ebola had been limited to isolated rural communities in eastern and central Africa. This epidemic instead struck West Africa and for the first time reached major urban areas. Guinea, Sierra Leone, and Liberia proved to be particularly vulnerable: all are fragile states with weak governance and health and disease surveillance systems, and all utilized burial practices that were highly prone to transmission of the disease. This combination of factors enabled an outbreak of the disease unlike any before. The resulting public health crisis quickly escalated into a global humanitarian emergency and urgent national security priority. President Obama has been clear that we must stop Ebola at its source, help affected communities restore essential health services, and build resilient health security systems to mitigate, detect, and rapidly respond to future outbreaks before they become epidemics.

However, the mission is far from accomplished. Despite faster-than-anticipated progress in reducing transmission, previous outbreaks have taught us that the road to zero cases can be long and bumpy. A single case, if undetected, can rapidly spawn tens and then hundreds of additional cases. We remain focused, in close partnership with the affected governments in the region, on extinguishing all remaining cases, and putting the region back on a path to development.

The U.S. government strategy encompasses four key pillars: controlling the outbreak; mitigating second-order impacts; ensuring U.S. leadership toward a coherent and coordinated response; and pursuing enhanced global health security. We welcome this opportunity to update the subcommittee on our efforts and progress to date, and how this outbreak can be brought to an

end. We will also brief you on our plans to help West Africa recover from the negative impact of this disease and rebuild key systems that will allow for better preparation and response to future outbreaks.

## U.S. GOVERNMENT STRATEGY AND RESPONSE TO EBOLA

#### Immediate Response

The United States first responded to the crisis in March after Ebola was detected in Guinea. Early efforts brought down cases to nearly zero through May, but unfortunately there was a resurgence of transmission in June as Ebola began to reach urban areas. By July, the region's health systems were overwhelmed, contagious corpses lay in the streets, doctors were dying, and entire families were being wiped out by the virus. It became clear this was no longer simply a public health emergency but a full-blown humanitarian crisis.

USAID's Disaster Assistance Response Team (DART) platform was deployed on August 4<sup>th</sup> to lead, coordinate, and mobilize an expanded whole-of-government effort to control the outbreak. As President Obama stated in October, the DART has been the "strategic and operational backbone of America's response," coordinating the overall international response, the coherent deployment of relevant U.S. government capabilities, and delivery of needed assistance both directly and through non-governmental organizations (NGO) and U.N. partners. With staff deployed across the region, the DART is facilitating a complex pipeline of expertise, funding, and supplies that has been crucial for an effective regional response. Through this platform, the U.S. government response cohesively weaves together capabilities from across the U.S. government, including the Department of Health and Human Services (in turn including the Centers for Disease Control and Prevention and the U.S. Public Health Service), the Department of Defense, the U.S. Forest Service and the Department of State.

Working in support of the governments of the affected countries, USAID has pursued a holistic strategy to contain and ultimately defeat this outbreak. Responses to previous Ebola outbreaks have relied principally on isolation and care to curb the spread of the disease. In order to quickly expand safe isolation and care, USAID called on the U.S. military to deploy in support of our efforts. The military built treatment centers, trained medical staff, expanded laboratory testing capacity, and supported operational logistics. To staff and operate Ebola Treatment Units

(ETUs) in every county in Liberia, USAID engaged NGO and private sector partners to mobilize clinical management teams.

Facing a critical shortage of medical volunteers in September, USAID facilitated the Department of Defense's (DoD) deployment of the Monrovia Medical Unit, and partnered with staff from the U.S. Public Health Service Commissioned Corps to operate the facility. The Monrovia Medical Unit assured a high level of Ebola care to healthcare workers and other responders, giving them the confidence to join the fight.

As U.S.-supported ETUs opened through the fall, USAID worked with the United Nations (U.N.) to establish logistical support and distribution networks to move vast volumes of Personal Protective Equipment (PPE) and other critical supplies across the region. We also worked with CDC and NGO partners to set up rapid response capacity to quickly contain new transmission chains in remote areas.

However, the scale of this outbreak— and the inherently limited pace of rapidly scaling up sophisticated case management capacity— meant that a more diverse and holistic approach was required. USAID simultaneously worked with partners to attack major sources of Ebola transmission: unsafe burial practices and high-risk care giving in health and in-home settings.

In Liberia, we increased the availability of culturally-sensitive and safe burials through 70 burial teams providing nationwide coverage, and worked with the Government of Liberia to provide a national memorial cemetery for Ebola victims. We are helping reach 1.5 million people daily with radio messages on Ebola prevention and treatment and through USAID funding have helped mobilization teams reach more than 100,000 households. We trained health care providers on improved infection prevention and control practices, and are setting up networks to supply them with the PPE they need to be safe in their day-to-day work. Because of our efforts, 3,000 people have been trained to work in ETUs in Liberia, 2,000 of whom are Liberians. In addition, USAID is helping to train staff in infection control protocols and re-supplying PPE and other essential supplies at 128 non-Ebola health care facilities. We have also expanded the pipeline of medical

equipment and supplies and delivered 140,000 sets of PPE including medical gloves, protective coveralls, goggles, and face shields.

From the outset, USAID has been focused on ensuring a well-organized and data-driven response. USAID worked with CDC to support a clear and unified Incident Management Structure within the Government of Liberia to install a modern Emergency Operations Center to unify and align all elements of the response. USAID deployed data experts to Liberia to streamline epidemiological reporting systems and improve the quality and operational utility of case reporting.

#### Regional Response

Our efforts were not limited to Liberia— to address a regional outbreak, we mounted a regional response. In Sierra Leone, where the United Kingdom has stepped up as the lead international partner, USAID has supported burial teams, funded three ETUs, mobilized DoD lab capacity, improved infection prevention and control, and enhanced public awareness of the disease. With funding from USAID, there are 54 safe burial teams operational in all 14 districts of Sierra Leone. We have also funded teams to conduct door-to-door campaigns to inform households about Ebola, identifying active cases and providing lifesaving assistance to those awaiting transport to a safe bed. Since December, USAID-supported partners have trained thousands of health care workers in infection control standards and ETU management to ensure they have resources and skills to safely care for Ebola patients. Additionally, through the expansion of the medical equipment and the supply pipeline to the region, USAID has provided 30,000 sachets of oral rehydration salts, 20,000 PPE coveralls, 1,300 body bags for safe burials, and 38.5 metric tons of chlorine (more than 1,830 drums) for disinfection in Sierra Leone.

In Guinea, USAID is supporting five partners to carry out community outreach activities that inform Guineans about the illness and how to protect themselves and loved ones. USAID supports two media production hubs, production of a daily radio program, and advises journalists on how to accurately report on the disease in affected communities. We have funded the construction of two ETUs and the operation of an Ebola Transit Center, where patients can seek referrals and get lab results before receiving care at an ETU. We have provided 6,500 infrared thermometers to the Government of Guinea now being used to screen children returning to

schools across the country, and are working with partners to help ensure the availability of necessary hand-washing stations in schools to help protect schoolchildren. The U.S. is also funding more than 40 infection prevention specialists to serve in medical facilities or provide infection prevention supervision at the prefecture level. There are now 70 burial teams covering all prefectures across Guinea. We continue to support contact tracing, infection prevention in health centers, and in-depth medical training of over 3,000 health care workers.

USAID has also moved swiftly to contain regional flare-ups. In early November reports emerged about a cluster of cases in Mali stemming from a case originating in Guinea. USAID rapidly deployed DART staff to Mali to work with U.S. government interagency partners and assist the government response effort. Working together with CDC and the Embassy, the DART was able to apply key lessons learned from the response in the rest of the region and work with NGO and U.N. partners to set up new programs. This swift action and coordination helped to limit the transmission in Mali and quickly bring an end to the outbreak in that country.

# Adapting Our Strategy

As case rates have dropped, we have remained nimble, shifting the focus of our regional response strategy from breaking exponential case growth to reducing the caseload to zero. This evolution includes targeted national and sub-national level interventions to track down every case, and ensure a rapid and robust response to new hotspots. In consultation with the Government of Liberia, we scaled back the size and number of planned U.S.-built ETUs-from 17 to 15—while continuing to ensure broad geographic coverage and access to safe treatment in each of Liberia's 15 counties. The build size for many ETUs was reduced from 100 beds to 50 beds and new ETUs opened with just 10 to 20 operational beds, with the ability to scale-up in the event of resurgence. The availability of geographically dispersed care and treatment will allow patients to be treated closer to their communities, making it more likely that they will seek out treatment, and mitigate further exposure in the community. This allows families to safely visit patients and stay connected with their loved ones, ensures that families continue to be monitored for symptoms, and helps to decrease the possibility of further contamination from people seeking treatment far away from their homes. Where ETUs are receiving few patients, our partners are utilizing ETU healthcare workers to improve infection prevention and control in the normal health system, to support the re-opening of non-Ebola health facilities.

Despite the promising trends, we know based on previous outbreaks that it can be a difficult road to zero and the epidemic is not over until all affected countries have been declared Ebolafree. USAID's flexible, adaptive strategy will continue to evolve with the conditions on the ground. The Ebola emergency appropriation is essential to sustaining our efforts to get to zero. This is a fight we cannot afford to lose.

### MITIGATING KEY SECONDARY IMPACTS

As we continue tracking down and isolating remaining cases of Ebola in the region, we have initiated actions to safely restart health care services to regain lost ground and strengthen the health care delivery systems necessary to be prepared for future outbreaks of Ebola and similar diseases. We are also working to help 13 other at-risk countries in sub-Saharan Africa to prepare for possible Ebola outbreaks. Finally, we are working to assist the rest of Sub-Saharan Africa in becoming better able to detect and respond to Ebola and other similarly devastating diseases.

This crisis hit three countries where nearly half the total population already lives in poverty. They are among the poorest countries in the world. Thus, in addition to the major focus on health, we will address the immediate needs of populations who lost ground and became more vulnerable because of Ebola. These include those who suffered directly from Ebola as patients, survivors, new orphans, and populations quarantined. Many lost their jobs and income as the economy slowed down and became more food insecure as food markets ceased to function.

# **Rebuilding Health Systems and Expanding Preparedness**

Tackling the root vulnerabilities and gaps in West Africa's health and preparedness systems will be critical to avoiding future epidemics of Ebola or other diseases. That is why USAID plans to invest \$438 million in a three-pronged approach of bolstering preparedness and response capabilities for West African countries most at-risk for future outbreaks which have the potential to become epidemics; expanding viral surveillance in Africa and other transit hubs; and safely restarting health services and strengthening health systems in the three affected countries. These efforts will be part of the U.S. government's commitments to the larger Global Health Security Agenda.

#### Restarting Health Services and Systems in Liberia, Sierra Leone, and Guinea

Sierra Leone and Liberia are only ten years removed from brutal and destructive civil wars. Their health systems, already degraded by years of conflict and neglect, were vulnerable to an Ebola outbreak. The Ebola crisis has since paralyzed existing systems and put an enormous burden on what was already a strained health care workforce. For example, since the Ebola crisis hit, immunization rates have dropped significantly, maternal mortality has increased, and malaria cases are increasing. Liberia, Guinea, and Sierra Leone were among the poorest countries in the world with the highest levels of preventable deaths of children under-five before the outbreak; the health status of the poor and vulnerable in these three countries has declined since the outbreak.

USAID seeks to integrate capabilities and assets we have built up during the response to Ebola — including trained healthcare personnel and advances in information systems— into the health care systems of the affected countries. This integration will require adjustments to how the health care system hires, incentivizes, and compensates staff as well as manages clinics, pharmaceuticals and core information systems to deliver basic care safely. For example, thousands of health care workers in Liberia, Sierra Leone and Guinea have now been trained in infection control standards as part of the Ebola response. USAID is scaling up these efforts to support non-Ebola specific health facilities, training their workers on infection control protocols and providing supplies, such as PPE.

To help health facilities provide a timely and effective response to future outbreaks of Ebola or other infectious diseases, we are seeking ways to improve their data and information systems and the communications technologies to enable more timely management of health data and response to outbreaks. Data systems are now in place in all three countries that can provide earlier indications of flare-ups and enable rapid response. USAID is exploring advances in diagnostics that reduce the difficulty of rapidly transporting blood samples over terrible roads and real-time data to better predict spikes and valleys in active cases. As these efforts must be maintained after the current attention and funding subsides, significant attention is being directed to ensuring their sustainability.

Bolstering Ebola Preparedness and Investing in Health Security and Investing in Health Security USAID also aims to bolster Ebola preparedness systems in countries neighboring Guinea, Liberia and Sierra Leone. The aim is to stop outbreaks of Ebola or another infectious disease threat before they cross borders and to improve systems to detect and rapidly respond if they do. In addition to our efforts to stand up Ebola Preparedness and Response Plans in Liberia, Sierra Leone and Guinea, USAID is partnering with the CDC and WHO to help 13 other West African countries (Cote d' Ivoire, Mali, Senegal, Guinea Bissau, Gambia, Mauritania, Burkina Faso, Niger, Togo, Benin, Ghana, Cameroon, and Chad) develop and test their own national Ebola Preparedness and Response Plans. These efforts build upon the Public Health Emergency Framework developed by USAID and CDC, in cooperation with the WHO. Piloted in the Democratic Republic of Congo and Uganda, these guidelines helped to quickly identify and contain outbreaks of Ebola and Marburg virus in these countries last year.

Targeting first the countries immediately neighboring Liberia, Sierra Leone, and Guinea, we have undertaken assessments of each country's risks and needs using the new Emergency Framework. All 13 countries have developed Ebola Preparedness and Response Plans. With Congressional support, USAID and CDC is supporting implementation of these plans, including ensuring each country has at least one laboratory capable of detecting the Ebola virus and trained personnel at border sites to identify and manage suspect cases by the middle of this year. We will work with our multilateral partners to build the capacity of regional institutions to bolster cross-border surveillance and preparedness.

The Ebola epidemic has shown us the importance of the Global Health Security Agenda, launched by the United States with international partners in February 2014. This Agenda includes 44 countries from every region and seeks to advance a world safe and secure from infectious disease threats like Ebola and to bring nations together to prevent, detect, and rapidly respond to outbreaks before they become epidemics that threaten the global community.

Through our commitment to the Global Health Security Agenda, we will prevent, detect, and respond to infectious diseases threats. These investment s will prevent emerging diseases from

spreading, report threats in real-time, and establish needed capability for expert personnel and equipment to stop health emergencies before they become epidemics. We will establish measurable, long-term capacity in areas that have been shown to be critical for rapid prevention, detection and response to outbreaks like Ebola. These capacities include the ability to prevent the emergence and spread of zoonotic diseases, conduct real-time biosurveillance, a trained disease detection workforce, national laboratory systems, emergency operations centers, and national biosafety & biosecurity systems. For example, now that Ebola has emerged in West Africa, it is likely to reoccur periodically as the virus is endemic in certain wildlife in the region. With the FY 2015 Omnibus funds, USAID will track Ebola and other viruses in wildlife, increase lab capacity to process samples quickly, monitor human behaviors that increase opportunities for spillover, and improve disease surveillance systems to detect outbreaks in realtime. We will expand into new hot spots within Africa and other transit points where the threat of animal-borne diseases is highest. Similar to successes seen with H5N1 Avian Influenza where global health security investments reduce the outbreak from 55 countries to six, these investments will be more likely to detect Ebola and other threats in wildlife before they become human epidemics. Working closely with CDC and other U.S. departments and agencies, USAID will play a critical role toward the broader U.S. Government commitment to assist at least 30 countries in five years to achieve all of the GHSA target goals.

# **Mitigating Secondary Impacts**

Ebola not only shut down health systems, but threatened livelihoods and rolled back development gains that took years to achieve. With support from Congress, we are beginning to address key secondary impacts with the goal of helping to rebuild more resilient systems that are better prepared to withstand future epidemics or shocks. These efforts will be critical to ensure regional prosperity and stability as well as our own national security.

## Restoring Livelihoods and Economic Growth

USAID's Famine Early Warning Systems Network (FEWSNET) estimates that over 40 percent of Liberians, Sierra Leoneans, and Guineans will experience acute food insecurity this year. To date, USAID has provided nearly \$35 million to provide emergency food assistance to patients in ETUs, community care centers, and orphanages, to Ebola-affected families and to people in

quarantine. Through our partner, U.N. World Food Program, USAID has helped to distribute more than 35,000 metric tons of food to more than 2.6 million people in Ebola-affected regions of Guinea, Liberia, and Sierra Leone since August. Of the \$35 million provided to the World Food Program, nearly \$23 million was for locally and regionally sourced rice, oil, and beans, which is helping to sustain local trade.

FEWSNET analysis indicates access to food - rather than its availability - is the challenge facing households. Given the emergency appropriation, USAID plans to invest \$112.8 million to address urgent food insecurity to restart the functioning of local markets. USAID is partnering with NGOs working in the region to provide vouchers and cash transfers to households that lost their livelihoods and resupply farmers who ate their seeds or sold their tools in order to make ends meet so that they can resume farming.

For example, in January, we partnered with Mercy Corps to provide targeted assistance for agricultural inputs to households—125,000 people—in Liberia who are struggling to feed their families. Vouchers will benefit those in urban areas who have lost jobs and cannot afford to pay for food. USAID's Bureau for Food Security and Office of Food for Peace will deploy joint assessment teams to the three most affected countries to review the current agricultural and nutrition situation to identify priorities and gaps in the programs. We believe that these efforts, along with planned investments in West Africa's agricultural sector, will help prevent rising food insecurity and poverty rates in West Africa.

# Expanding Citizen Participation

Ebola's rapid spread was fueled by the tendencies towards keeping government decision-making centralized in the capitals of the affected countries. Citizens' low confidence in their governments made people reluctant to accept care or information from government and health officials. However, as the Ebola response continued, citizens and civil society groups took actions to help their communities, supported by trusted local leaders. There is now recognition that community involvement made a difference in bringing down infection rates. Building upon this new opening, USAID will work to strengthen citizen oversight of and engagement with the governments of Liberia, Sierra Leone, and Guinea. We will seek to build the capacity and

provide tools that will enable communities, independent media, parliamentarians and local officials to have greater access to information and interact on issues of concern. A likely focus may be on jointly assessing how the government, communities, and local authorities worked together on this Ebola response and how they can collectively prepare to respond better in the future.

In Guinea, ongoing efforts to mitigate the risk of conflict, especially in advance of elections this year, will be expanded. An information campaign, funded by the Complex Crises Fund, has started to expand its network of traditional communicators and radio programs to overcome deep-seated government mistrust and misunderstanding about Ebola among tribal communities in Guinea's Forest Region. In all three countries, these efforts will be critical to strengthen public confidence in government, and ensure an effective and transparent Ebola response and recovery.

# Investing in Education

The safe reopening of schools will be a critical sign of the ability of government to deliver a highly valued service. Simply reopening schools, however, will not be enough. In Guinea, where schools have reopened, data reveal that only 27% of students have returned. With Congressional support, USAID is actively working with school authorities in the affected countries to test protocols and train teachers on how to manage suspected cases of Ebola, including informing parents or guardians, and transporting possibly infected children to facilities for further investigation. We are helping integrate Ebola awareness into the school curricula and install hygiene and hand-washing stations to keep children and teachers safe – and reassure parents.

# Harnessing innovation to fight Ebola

Our response remains guided by continuous assessment, learning, and innovation. By harnessing the power of crowdsourcing, competition, and partnerships, we believe we can do more to improve response and preparedness for future outbreaks. To catalyze innovation in our response, President Obama launched *Fighting Ebola: A Grand Challenge for Development*, a grant competition designed to generate new ideas and technologies for PPE and Ebola control to increase the speed and efficiency of our response today and in the future. The Challenge,

implemented by USAID will invest in as many as 15 innovations to improve healthcare workers' safety. Three teams, announced in late December, will produce redesigned PPE that builds in cooling components, better visibility and safer removal; a long-lasting antiseptic that provides pathogen protection for health care workers; and a spray-on barrier protection that repels microbes, with the goal of eventually allowing healthcare workers to use more breathable fabrics when treating future epidemics of Ebola and other infectious diseases – critical to reducing healthcare worker infections in hot environments.

## CONCLUSION

In our fight against Ebola, we have seen great suffering, but also scenes of survival and resilience. Patients can beat this disease. The U.S. government in collaboration with our international partners, including many volunteers and NGOs, can beat this disease. To get to zero, we must remain vigilant.

This unprecedented epidemic has required a herculean global effort. And we have seen how America's leadership galvanized a worldwide response from governments, NGOs, and volunteers.

Ebola underscores the importance of tackling fragility and extreme poverty in these poor countries. It quickly debilitates weak institutions and systems, wreaking havoc in communities least prepared to fend off the disease. We strive to not only reach our goal of getting to zero Ebola cases in West Africa, but strengthen health systems, enable societies to fend off future threats, and allow those who lost ground to return to a path of prosperity and stability. These efforts are core to USAID's mission to end extreme poverty and promote resilient, democratic societies. They are also critical to America's interests and security at home and abroad.

We want to honor the humanitarian workers, health care providers, and all Americans working to turn the turning the tide in West Africa. What they have accomplished and continue to achieve represents the best of what America has to offer.

Thank you for the vital Congressional support that makes these efforts possible.