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PERFORMANCE EVALUATION OF USAID'S ZIKA RESPONSE IN THE LATIN AMERICA AND CARIBBEAN (LAC) REGION

February 2019

This publication was produced at the request of the United States Agency for International Development. It was prepared independently by Constance A. Carrino (team leader), Alessandra Noriega Minichiello, Alba Amaya-Burns, and Lindsay Harnish.

Cover Photo: A staff member of Zika AIRS Project Jamaica speaks with homeowners about mosquito control in rural St. Thomas Parish, Jamaica. © 2018 Stephen Kierniesky, Courtesy of Photoshare

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February 2019

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ABSTRACT

In 2016, USAID initiated a three-year, multi-country health emergency response to Zika and the negative pregnancy outcomes of the virus in Latin America and the Caribbean. This performance evaluation used a mixed-methods approach and comes in the final year of the response. It focuses on understanding the enablers and limitations addressed, accomplishments in strengthening systems in countries, and how the response was managed. The evaluation also reviews USAID's initial decision-making process and the various implementation levels—regional, national, and sub-national/community—engaged during implementation.

Using experienced organizations and evidence-based approaches under a tight timeframe, USAID assisted governments in integrating Zika into existing arbovirus programs, establishing specialized training in entomology, and tracking insecticide resistance. The Zika response introduced a Quality Improvement approach into prenatal, pregnancy, delivery, and neonatal care for Zika, and brought men in as partners in Zika prevention prior to and during pregnancy. This assistance appears to have facilitated the absorption of innovations and strengthened partner country ability to better respond to Zika in the future.

Recommendations at this juncture include suggestions for effective close-out at the country level and for providing future access to the experience and technical materials prepared under the response. For the future, it is also recommended that USAID align contracting and budgeting elements with the needs of health emergency responses, and review management structures for rapid response within the Bureau for Global Health.

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ACRONYMS

AOR	Agreement Officer Representative
APS	Annual Program Statement
ASSIST	Applying Science to Strengthen and Improve Systems Project
BA	Breakthrough ACTION (Johns Hopkins University Center for Communications)
BR	Breakthrough RESEARCH (Johns Hopkins University Center for Communications)
CARPHA	Caribbean Public Health Agency
CDC	U.S. Centers for Disease Control and Prevention
COMISCA	Council of Ministers of Health of Central America
COR	Contracts Officer Representative
DDL	Development Data Library
DHHS	Department of Health and Human Services
DRC	Democratic Republic of the Congo
FAO	United Nations Food and Agricultural Organization
GBS	Guillain-Barré syndrome
GH	Bureau for Global Health (USAID)
GH/CAII	Bureau for Global Health's Center for Accelerating Innovation and Impact
GH/ID	Bureau for Global Health's Office of Infectious Disease (USAID)
GHSC	Bureau for Global Health's Supply Chain Program
GHSC PSM	Global Health Supply Chain Program Procurement and Supply Management
HPV	Human papillomavirus
IAA	Interagency agreement
ICH	Integrating Community Health
IFRC	International Federation of Red Cross and Red Crescent Societies
IP	Implementing partner
IPPF	International Planned Parenthood Federation
IRS	Indoor residual spraying
K4H	Knowledge for Health (Johns Hopkins University Center for Communications)
KAP	Knowledge, attitude, and practices
KII	Key informant interview
LAC	Latin America and Caribbean
LEG	Office of Legislative Affairs (USAID)
LOE	Level of effort

M&E	Monitoring and evaluation
MCDI	Medical Care Development International
MCH	Maternal and child health
MCSP	Maternal and Child Survival Program
MERS	Middle East respiratory syndrome
MNCH	Maternal, neonatal, and child health
MOH	Ministry of Health
NAMRU-6	U.S. Naval Medical Research Unit
NGO	Nongovernmental organization
OAA	Office of Acquisitions and Agreements (USAID)
OFDA	Office of U.S. Foreign Disaster Assistance (USAID)
OMB	Office of Management and Budget
PADF	Pan American Development Foundation
PAHO	Pan American Health Organization
PASMO	Pan American Social Marketing Organization
PEPFAR	President's Emergency Plan for AIDS Relief
PHEIC	Public health emergency of international concern
PIO	Public international organization
PrEP	Pre-exposure prophylaxis
PSC	Personal Services Contracts
PSI	Population Services International
QI	Quality improvement
RELDA	Arbovirus Diagnosis Laboratory Network of the Americas
RNA	Ribonucleic acid
SARS	Severe acute respiratory syndrome
SBCC	Social and behavior change communication
SENEPA	Servicio Nacional de Erradicación del Paludismo (National Malaria Eradication Service)
SIFPO II	Support for International Family Planning Organizations
SOPs	Standard operating procedures
SSI	Sustainable Science Institute
SSQH	Services de Santé de Qualité pour Haïti
STAR	Sustaining Technical and Analytical Resources
U.N.	United Nations
UNFPA	United Nations Population Fund

UNICEF	United Nations Children’s Fund
USAID	United States Agency for International Development
VC	Vector control
WHO	World Health Organization
ZAP	Zika AIRS Project

EXECUTIVE SUMMARY

The goal of the three-year, United States Agency for International Development (USAID) Zika response in the Latin America and Caribbean (LAC) region is to “support and strengthen systems for priority countries in their Zika response effort in order to minimize negative pregnancy outcomes.” This performance evaluation, conducted between June and October 2018, will inform the remainder of USAID’s Zika response, and advise the USAID Bureau for Global Health Office of Infectious Disease (GH/ID) on future work on health emergencies.

Zika is a virus transmitted by *Aedes aegypti* and *Aedes albopictus*, the same mosquitoes that transmit dengue, yellow fever, and chikungunya. It is also transmitted via sexual intercourse and through mother-to-fetus transmission, and can cause miscarriages, stillbirths, and babies born with microcephaly and other neurological problems. There is no vaccine. In December 2015, the World Health Organization (WHO) published an alert describing a possible association of Zika with malformations in newborn babies and on February 1, 2016, the WHO director general declared a public health emergency of international concern (PHEIC) that lasted nine months.

By December 2015, USAID had a multi-pronged plan to address the Zika virus in the LAC region, and a February 22, 2016, Obama administration request for Zika funding included \$335 million for use by USAID. In April 2016, \$211 million in redirected Ebola funds were made available for USAID for Zika work, and in September 2016, an additional \$145.5 million for technical assistance and \$10 million for operating expenses were appropriated by Congress, for a total authorized amount of \$366.5 million for the USAID Zika response in LAC.

Existing global health projects and grant mechanisms were tapped for rapid, centralized implementation. Partnering organizations provided assistance in vector control (VC), service delivery, communications, community engagement, and commodities. Five countries—the Dominican Republic, El Salvador, Guatemala, Honduras, and Haiti—received a full range of assistance under the response, while another 18 countries in the region received tailored programming.

Key findings for the five evaluation questions posed by USAID below are based upon materials review, in-depth interviews, surveys, and field visits to Colombia, Dominican Republic, Guatemala, Jamaica, and Paraguay, along with direct observations by the evaluation team.

KEY FINDINGS

Evaluation Question 1: What enabled the successful achievement of program objectives and why? What barriers hindered the successful implementation of objectives and why?

Enabling factors centered on appropriate partner government leadership, existing emergency response practices, and technical know-how resulting from experience in addressing arboviruses. Regional networks and alliances with established bodies, including United Nations (U.N.) organizations and other regional platforms, enabled information-sharing and rapid responses, and facilitated the adaptation of regional protocols and guidance to address Zika.

The Zika response had to address weak health systems with high turnover rates, limited technical specialists at the service delivery level, limited diagnostic capacity, and supply chain management inefficiencies. National-to-community-level health system linkages were fragmented, and government leadership changes, community violence, gender norms, and fears by governments of Zika’s economic impact on tourism also hindered plans and progress in selected countries.

Evaluation Question 2: What specific practices and features of the USAID Zika program have enabled or limited programmatic alignment and useful information sharing among partner governments and implementing partners?

Enabling factors identified include the level USAID financial support, and USAID's success in tapping experienced human resources. Other enabling approaches and tools included regular in-country implementing partner (IP) meetings, regional meetings that included government stakeholders, and an internal web-based platform that allowed implementers to share on-the-ground experiences, USAID guidance, and research results across the Zika response.

The Zika response was funded and fielded as the LAC Zika epidemic passed, and adequate alignment was hindered by the lack of initial reconnaissance, and little initial, substantive engagement and planning with governments or USAID missions.

Evaluation Question 3: How has the USAID Zika response strengthened and supported existing vector control, service delivery, or social and behavior change communication systems?

USAID assisted governments in integrating Zika into arbovirus vigilance and establishing specialized training in entomology and tracking insecticide resistance. Zika services were introduced into prenatal, pregnancy, delivery, and neonatal care and follow-up using a quality improvement (QI) approach. Although the Zika response garnered multiple messages, some of which were not evidence-based, the response also developed and fielded key behavior changes for Zika prevention in a format that allowed implementers to assess a behavior's efficacy, flexibility, potential to reduce transmission, frequency required to be effective, and the ease of access to materials required.

In the response online survey, 76 percent of IP respondents agreed (45 percent) or strongly agreed (31 percent) with the statement that the USAID response had (or was) leaving capacity in place at the country level for future responses. For the 12 countries where work began in 2016, consolidated data indicate that 33,965 persons were trained in various aspects of VC, 13,716 health providers were trained in Zika prevention counseling for women of reproductive age, and 6,878 communities now have members actively participating in monitoring, prevention, and/or support activities. The Zika response continues to consolidate further performance data.

Evaluation Question 4: Using Zika as a case study, what did USAID consider in making programmatic decisions for the Zika response and what additional information would have been valuable for these decisions? Based on this experience, what criteria should USAID consider in making programmatic decisions during a health emergency response?

The response design in late 2015 and early 2016 was assisted by informed decision-making based on the then-recent Ebola response in West Africa. Reports from the field, federal interagency meetings, and a weekly bulletin all informed decision-making. Centrally funded mechanisms were tapped for their technical expertise and ease of management and reporting, and staff were hired or seconded based on language, regional knowledge, and technical skills.

Challenges during the design and start-up of the Zika response included a task force that was initially too large and inefficient, and limitations that affected both design and implementation: the lack of dedicated leadership, cumbersome internal contracting procedures, and not enough solid consultation and planning with partner governments and USAID missions.

Evaluation Question 5: Using Zika as a case study, how did implementation at each level (community/local, national, and regional) contribute to meeting USAID’s goal, and how could this implementation inform future health emergency responses?

Engagement at the national level was particularly important for meeting Zika response objectives. National governments, especially ministries of health, provided leadership, national communication campaigns, infrastructure and resources (including human resources), policies and guidelines, surveillance, and data analysis for use in decision-making.

Regional and international organizations, especially WHO, the Pan American Health Organization (PAHO), and the United Nations Children’s Fund (UNICEF), provided normative guidance relevant to the Zika response and assisted as technical liaisons with governments for USAID technical contributions. At the community/local level, a cadre of community engagement IPs were singularly focused locally and, along with VC and services implementers, contributed to building the capacity of communities and local governments.

KEY CONCLUSIONS AND RECOMMENDATIONS

USAID has achieved the Zika response goal by helping governments integrate Zika into arbovirus vigilance and programming, establishing specialized training in entomology and tracking insecticide resistance, introducing the QI approach into prenatal, pregnancy, delivery, and neonatal care, and integrating male partners into reproductive health services.

A newer and much more difficult health challenge will be care for children affected by Zika as they grow. Most promising in this area is the integration of Zika-affected children into UNICEF and other initiatives for early child health or children with deformities and, more specifically, continued tracking of children affected by Zika. USAID is also considering discrete options for children affected by Zika.

In the near term, the Zika response should: 1) finalize plans for hand-off of Zika response capabilities for each partner country, 2) conduct formal government-to-government close-out discussions with partner governments and key stakeholders, and 3) develop a dissemination plan for sharing the Zika response with other USAID regions.

External and internal online communication networks positively served USAID, IPs, and other stakeholders throughout the Zika response. The public Zika Communication Network has an important usefulness beyond the life of the Zika response as a detailed repository of technical and programmatic experience, especially as future outbreaks within the Americas and beyond are possible. (The public site is found at www.zikacommunicationnetwork.org; the internal site is referred to as the Zika Partners Communication Network.) The Zika response should develop alternatives to save and/or continue the public Zika Communication Network website content, and work with key government counterparts to provide Zika Communication Network materials, tools, and training examples for online use within host country systems.

GH/ID can manage a large, multi-country health response; however, procurement and budgeting requirements had a limiting effect on activities at various stages of the Zika response. In future health emergency responses, USAID’s Bureau for Global Health should ensure that 1) commodities are available on time, 2) procurement and workplan development plans fit the needs of a rapid, centralized response, and 3) follow-up reviews are scheduled after an emergency response. For rapid deployment and optimal coordination, GH/ID should also develop standard operating procedures (SOPs) on how to lead, staff, launch, implement, and evaluate future health emergencies.

I. INTRODUCTION

EVALUATION PURPOSE

This report was produced as part of a performance evaluation of the three-year United States Agency for International Development (USAID) Zika response in the Latin America and Caribbean (LAC) region, which was ongoing at the time of the evaluation. The goal of the response is to support and strengthen systems for priority countries in their Zika response effort to minimize negative pregnancy outcomes.

The evaluation, conducted in Year 2 of the response, is meant to inform USAID's transition out of Zika assistance in the region. It provides a programmatic review and recommendations for USAID and implementing partners (IPs) for the response's final year (2019). A parallel purpose of this evaluation is to advise leadership of the USAID Bureau for Global Health's Office of Infectious Disease (GH/ID) on programming for future health emergencies.

EVALUATION QUESTIONS

Five main questions were posed for the evaluation. These are addressed in the findings section of the report.

1. What enabled the successful achievement of program objectives and why? What barriers hindered the successful implementation of objectives and why?
2. What specific practices and features of the USAID Zika program have enabled or limited programmatic alignment and useful information sharing among partner governments and implementing partners?
3. How has the USAID Zika response strengthened and supported existing vector control (VC), service delivery, or social and behavior change communication (SBCC) systems?
4. Using Zika as a case study, what did USAID consider in making programmatic decisions for the Zika response and what additional information would have been valuable for these decisions? Based on this experience, what criteria should USAID consider in making programmatic decisions during a health emergency response?
5. Using Zika as a case study, how did implementation at each level (community/local, national, and regional) contribute to meeting USAID's goal, and how could this implementation inform future health emergency responses?

EVALUATION FOCUS

Activities under the Zika response began in April 2016 and are scheduled to end in September 2019. This evaluation focuses on funding within the GH/ID's lines of effort in VC, service delivery, SBCC, and community engagement. This evaluation does not cover aspects of the response implemented by the U.S. Centers for Disease Control and Prevention (CDC) or the global challenges managed by USAID's Bureau for Global Health's (GH)Center for Accelerating Innovation and Impact (GH/CAII), both of which are also funded by USAID as part of the Zika response. The Statement of Work for the evaluation can be found in Annex I.

II. BACKGROUND

THE ZIKA VIRUS

Detected near the Zika River in Uganda in 1947, the first human cases of Zika were reported in Tanzania and Uganda in 1952, and in Nigeria in 1954.¹ In 2007, the first-known large Zika outbreak occurred in the Micronesian island of Yap. Zika is a ribonucleic acid (RNA) virus that belongs to the genus *Flavivirus*, and the family *Flaviviridae*, the same genus and family as dengue, yellow fever, and West Nile viruses.

Effects of the virus: Around 80 percent of Zika infections show only mild clinical manifestations, such as rash, conjunctivitis, fever, arthralgia, and arthritis. However, 5 percent of affected patients die after acquiring the disease, even in areas where health services are adequate. Infected pregnant women are at risk of developing complications referred to as congenital Zika syndrome.

Pregnancy complications include miscarriages, stillbirth, and babies born with microcephaly. Infants born to mothers with Zika may also develop neurological damage, such as seizures, difficulty swallowing, hearing and sight abnormalities, dysphagia and other gastrointestinal problems, epilepsy, hydrocephalus, posture impairment, and other severe cognitive outcomes at birth or several months afterward.² The Zika virus can also be transmitted via sexual intercourse³ and through mother-to-fetus transmission. Guillain-Barré syndrome (GBS) is a major Zika-related complication. Many patients with GBS require treatment in an intensive care unit equipped with ventilatory support for several months or years. GBS might occur at any age, including during pregnancy.⁴ See Annex VI for a shortened version of a World Health Organization (WHO)-compiled timeline of documented Zika activity worldwide from 1947 to 2016.

Vector Transmission: Zika is transmitted by two species of mosquitoes, *Aedes aegypti* and *Aedes albopictus*. It is a highly efficient vector capable of feeding on multiple human hosts over a short period. *Aedes albopictus* prefers breeding in such areas as the water-filled leaf axils of plants⁵; it has spread to temperate regions of the Americas, including the United States, as well as to Europe.⁶

A historic success in the control and eradication of *Aedes* mosquitoes occurred during the construction of the Panama Canal in 1905, where thousands of people had died of yellow fever and malaria. The U.S. armed forces instituted community mobilization and house-to-house enforcement measures, including

¹ A. S. Fauci, & D. M. Morens (2016), Zika virus in the Americas—Yet another arbovirus threat. *New England Journal of Medicine*, 374(7), 601–604. <https://doi.org/10.1056/NEJMp1600297>; K. A. Galán-Huerta, A. M. Rivas-Estilla, E. A. Martínez-Landeros, D. Arellanos-Soto, & J. Ramos-Jiménez (2016), The Zika virus disease: An overview. *Medicina Universitaria*, 18(71), 115–124.

² WHO (2018), Mosquito control: Can it stop Zika at source? <http://www.who.int/emergencies/zika-virus/articles/mosquito-control/en/>

³ S. LaMotte (2016), First known sexual transmission of Zika virus in U.S. was eight years ago. CNN update 12:13 PM ET, Wednesday, February 17, 2016. <https://www.cnn.com/2016/02/17/health/first-zika-virus-sexual-transmission/index.html>

⁴ WHO, Mosquito control.

⁵ S. Higgs (2016), Zika virus: Emergence and emergency. *Vector-Borne and Zoonotic Diseases*, 16(2), 75–76. <https://doi.org/10.1089/vbz.2016.29001.hig>

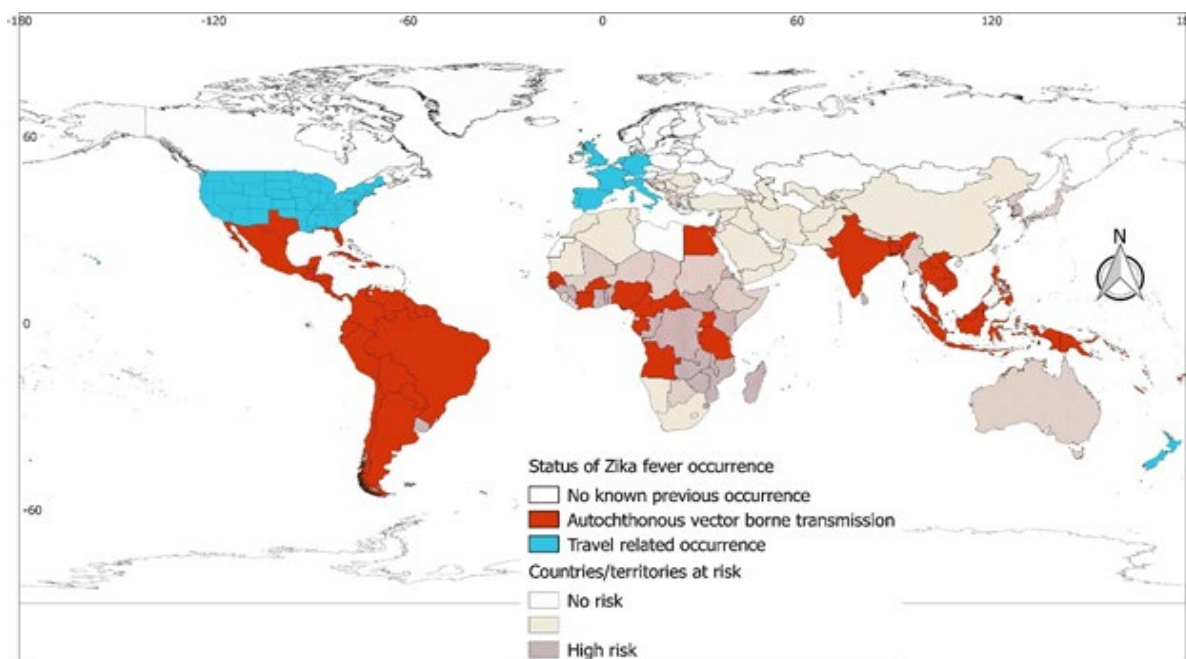
⁶ T. Pang, T. K. Mak, & D. J. Gubler (2017), Prevention and control of dengue—The light at the end of the tunnel. *The Lancet Infectious Diseases*, 17(3), e79–e87. [https://doi.org/10.1016/S1473-3099\(16\)30471-6](https://doi.org/10.1016/S1473-3099(16)30471-6)

the destruction of mosquito breeding sites, screening houses and buildings, drainage, oiling, larviciding, killing adult mosquitoes, and distributing prophylactic quinine.⁷ This action is often described as the first successful effort of applied public health epidemiology. By 1962, 18 countries in the western hemisphere were *Aedes aegypti*-free, and remained so until 1970.⁸ In more recent decades, VC and prevention programs in LAC have focused on outbreaks. This reactive approach, along with insecticide resistance, increased human travel, climate change, and urbanization, have led to the establishment and global spread of vectors and endemic status of these viruses.

Zika today: In 2015, Brazil reported an increase in microcephalic babies, and increased GBS cases in adult patients infected with Zika. In December 2015, WHO published an alert describing a possible association of Zika with GBS, and also with malformations in newborns. On February 1, 2016, the WHO director general declared a public health emergency of international concern (PHEIC) for the Zika virus and its complications. The PHEIC was lifted on November 18, 2016, in a statement noting that the Zika virus and its complications required a long-term response.

As of 2017, some 85 countries have reported cases of Zika; 48 of these are in the Americas. Autochthonous *Aedes* transmission of Zika cases have been reported in all regions except Europe (see Figure 1). At the time of the evaluation, there was no vaccine for Zika.

Figure 1. Global Zika Virus Occurrence, 2017



Source: S. Leta, S., T. J. Beyene, E. M. De Clercq, K. Amenu, M.U.G. Kraemer, & C. W. Revie (2018), Global risk mapping for major diseases transmitted by *Aedes Aegypti* and *Aedes Albopictus*. *International Journal of Infectious Diseases*, February, 67, 25–35.

⁷ U.S. Centers for Disease Control and Prevention (2015), The Panama Canal malaria history. https://www.cdc.gov/malaria/about/history/panama_canal.html

⁸ Pang, Mak, & Gubler, Prevention and control of dengue.

Imported cases of Zika have been reported in 8 European countries and 48 states of the United States.⁹ *Aedes aegypti* and *Aedes albopictus* are now present in all non-polar regions globally. In the LAC region, more than 500 million people live in areas at risk for *Aedes*-borne viruses.¹⁰ WHO reports that between 2015 and 2018 in the Americas and the Caribbean, there were 3,720 confirmed cumulative congenital Zika syndrome cases (see Table I). As noted above, a Zika timeline, including key actions in LAC and Zika response countries, can be found in Annex VI.

Table I. Zika Cases and Congenital Zika Syndrome in the Americas and the Caribbean, 2015–2018

(cumulative as of January 4, 2018)

	Autochthonous Suspected Cases	Autochthonous Confirmed Cases	Imported Cases	Incidence Rate (per 100,000 population)	Deaths among Zika Cases	Confirmed Congenital Zika Syndrome Cases
Total	583,451	223,477	6,329	80.41	20	3,720

Source: Pan American Health Organization (PAHO)/WHO, 2018

LEGISLATION AND AUTHORIZATION

By December 2015, USAID had prepared a multi-pronged plan to address the ever-increasing threat and unknown expansion of the Zika virus in the LAC region. On February 22, 2016, the Obama Administration requested \$1.89 billion from the U.S. Congress in supplemental funding as an emergency requirement, including \$335 million for use by USAID.

On April 6, 2016, the White House Office of Management and Budget (OMB) and the secretary of the Department of Health and Human Services (DHHS) announced \$589 million in Zika funding, including \$510 million drawn from “existing Ebola resources” (part of this included resources from USAID). These funds could be re-directed and spent on immediate efforts to control Zika’s spread in the Americas. USAID sought and received approval to use \$211 million in these unobligated Ebola funds for Zika activities.

In May 2016, the U.S. Congress passed supplemental appropriations measures for the Zika response, and in June, a conference agreement for \$1.1 billion in Zika response funding was filed and agreed to by the House of Representatives (House). In September 2016, both the Senate and House passed legislation just as USAID began implementing awards for work on the Zika response using the redirected funds. In that legislation, Congress appropriated \$145.5 million in continuing resolution funds for USAID’s Zika activities. The Congressional notification broke this out in technical areas: VC (\$75 million), maternal and child health (MCH) interventions and service delivery (\$40 million), and SBCC (\$30 million), along with \$10 million for operating expenses and \$500,000 for the inspector general. With redirected funds directed by the White House and OMB, the total authorized amount for USAID reached \$366.5 million.

⁹ Leta, S., T. J. Beyene, E. M. De Clercq, K. Amenu, M.U.G. Kraemer, & C.W. Revie (2018), Global risk mapping for major diseases transmitted by *Aedes Aegypti* and *Aedes Albopictus*. *International Journal of Infectious Diseases*, 67, 25–35. <https://doi.org/10.1016/j.ijid.2017.11.026>

¹⁰ Espinal, M (2018), Arbovirus in the Americas: Current situation and future directions. World Health Organization, p. 30. <https://www.congress.gov/114/bills/hr5325/BILLS-114hr5325enr.xml>

USAID ZIKA RESPONSE¹¹

USAID's Zika response in the LAC region is led from GH/ID, USAID's hub for programs and technical leadership in malaria, tuberculosis, One Health, and neglected tropical diseases, and which represents USAID within the international Global Health Security Agenda. GH/ID supports collaborations in a variety of international organizations (such as WHO, the United Nations Food and Agricultural Organization [FAO], and the International Federation of Red Cross and Red Crescent Societies [IFRC]), U.S. Government agencies (such as the CDC, Walter Reed Army Institute of Research, and the Naval Medical Research Center), and various private organizations and universities. GH/ID staff have extensive experience in global health emergencies such as avian influenza, severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS), Ebola, and plague.

Among USAID personnel, the Zika response is managed centrally by core staff from GH and LAC Bureau. The team includes three regional advisors, one each for Central America/Dominican Republic, South America, and the Eastern Caribbean, as well as individual country Zika coordinators in Dominican Republic, El Salvador, Guatemala, Honduras, Jamaica, and, since autumn 2018, Haiti.¹² Christina Chappell, GH/ID deputy director, and Eric Baranick, senior Zika advisor, are the current leads for the Zika response.

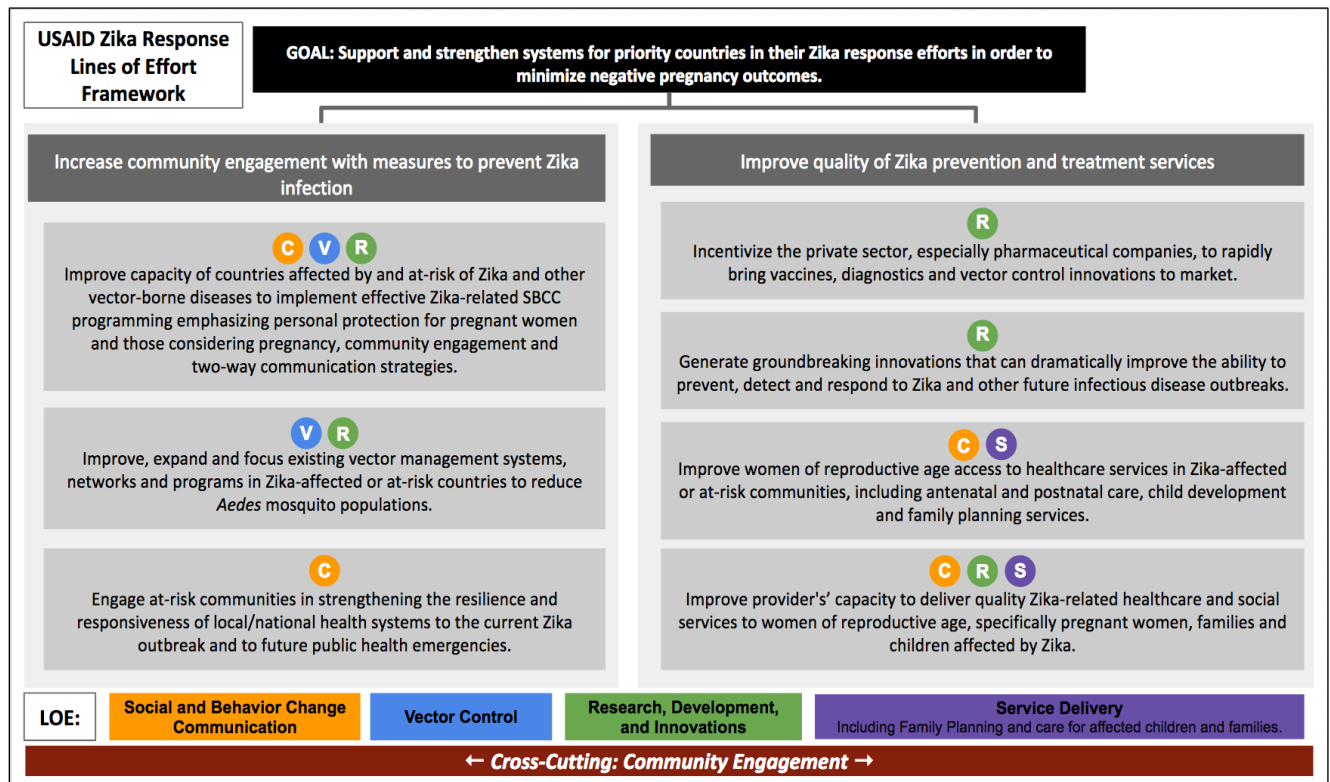
Other staff from USAID's bureaus for LAC and for Legislative and Public Affairs were also closely involved in the response design, and their participation continues in the implementation. Additional details on this process, which were collected during the evaluation, are found under Question 4 in the Findings section below.

To meet the Zika response goal to “support and strengthen systems for priority countries in their Zika response efforts in order to minimize negative pregnancy outcomes,” a response framework following U.S. Congressional lines of effort was developed, which focused on increasing measures to prevent Zika at the community level and improving the quality of Zika prevention and treatment services (see Figure 2).

¹¹ USAID Zika response and preparedness Congressional notification, CN #41, Nov. 4, 2016.

¹² Prior to the recent political unrest, Nicaragua was a Zika response country and had a Zika coordinator.

Figure 2. USAID Zika Response Lines of Effort



Source: GH/ID

Five countries (Dominican Republic, El Salvador, Guatemala, Haiti,¹³ and Honduras) receive a full package of assistance under the lines of effort. Jamaica, Paraguay, and Peru receive moderate assistance,¹⁴ and limited, tailored programming is provided in Ecuador and the eastern and southern Caribbean (Antigua and Barbuda, the Bahamas, Barbados, Dominica, Grenada, Guyana, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago), Colombia, and cross-border areas of some countries.

Existing GH projects in infectious disease, reproductive health, maternal, neonatal and child health, and systems strengthening were tapped for rapid, centralized response implementation, and community engagement partners were awarded grants under an annual program statement (APS)¹⁵ for the integrating community health (ICH) program. The organizations participating as IPs are as follows (more information on the organizations and their specific programs is found in tables starting on p. 73 in the Statement of Work, Annex 1):

- **VC:** Abt Associates; Pan American Health Organization (PAHO)

¹³Due to a fiscal year 2016-Congressional spending cap that impacted the ability to use supplemental funds, Zika activities in Haiti were limited after the first year. A Zika advisor was hired in Haiti in 2018.

¹⁴ Nicaragua received moderate assistance but closed due to civil unrest.

¹⁵ An APS is a USAID platform for obtaining concept papers and full applications, and issuing awards.

- **Service Delivery:** University Research Corporation; Johns Hopkins University's Jhpiego; International Planned Parenthood Federation (IPPF)¹⁶
- **SBCC:** Johns Hopkins University's Center for Communications; UNICEF; Population Services International (PSI); Population Council; Abt Associates
- **Community engagement:** Save the Children; Medical Care Development International (MCDI); CARE; Sustainable Science Institute (SSI); IFRC; Global Communities; Pan American Development Foundation (PADF)
- **Commodities:** Chemonics' Global Health Supply Chain Program Procurement and Supply Management (GHSC PSM)

Most of these organizations have subcontracts, grantees, and partners; some IPs are formal partners with others. USAID also supports 26 grand challenges awards for future innovations for Zika and other health threats, and an interagency agreement (IAA) with the CDC for 25 Zika activities uniquely contributing to lab strengthening as well as risk communications research and training, MCH research, epidemiology, and entomology. The grand challenges and CDC activities also involve partnerships.

¹⁶ Support for International Family Planning Organizations (SIFPO II) project, for work that ended in 2016. IPPF and its affiliate family planning associations in the LAC region left the program when the Protecting Life in Global Health Assistance Policy came into effect for their program.

III. EVALUATION METHODS AND LIMITATIONS

METHODS

This evaluation was conducted between June and October 2018 by a four-person team: Constance A. Carrino, team leader; Alessandra Noriega Minichiello, evaluation specialist; Alba Amaya-Burns, infectious disease advisor; and Lindsay Harnish, emergency response specialist (See Annex VIII for team member bios). A fuller description of the methodology appears as Annex II. The key informant interview and survey instruments are found in Annex III. A listing of evaluation key informants appears in Annex V.

A mixed-methods approach was used to collect data and information related to the evaluation questions, including:

- Document review, including program documents (e.g., workplans, partner reports submitted to USAID and posted on the public and internal Zika Communication Network/Zika Partners Communication Network website, briefing materials, monitoring and evaluation [M&E] plans, and journal articles)
- Briefings/informational interviews and discussions with selected USAID and partner contacts, to understand the background and context, and inform tool development
- In-depth individual and small group interviews with program stakeholders, to gain insight and input to sample evaluation questions
- Two online surveys, to validate and complement the in-depth interview results: one for USAID staff implementing or involved with the response, and another for the IPs (in both English and Spanish)
- Field visits to Colombia, Dominican Republic, Guatemala,¹⁷ Jamaica, and Paraguay to conduct interviews and directly observe interactions and field activities

The countries chosen for field visits represented different levels of USAID assistance and the different LAC regions: Guatemala (Phase I, Central America), Dominican Republic (Phase I, Caribbean) and Jamaica (Phase II, Caribbean), Colombia (Phase II, South America) and Paraguay (Phase II, South America). All countries had USAID missions. Field visits were conducted between August and October 2018.

For the in-depth interviews, the convenience sample of informants included: 1) USAID Zika advisors in Washington, D.C., and in the field; 2) USAID project agreement officer representatives (AORs) and contracts officer representatives (CORs); 3) IPs at headquarters and field levels; 4) Ministry of Health (MOH) officials; 5) key USAID personnel involved in program design; and 6) community/local, national, and regional stakeholders.

For the document review, the team reviewed general literature on Zika; USAID provided program documents and presentations, including IP workplans and reports, webinars, agendas and meeting reports, and Congressional language. The team relied heavily on the internal website, Zika Partners Communication Network. Additional materials were provided during the team's country visits, including tools that interviewees found useful. Annex IV provides a description of bibliographic sources provided

¹⁷Due to a transit strike in Honduras, the team shifted their planned field visit from there to Guatemala.

by USAID and a listing of other materials reviewed. Table 2 provides a breakout of documents and materials reviewed by document type.

Table 2. Documents and Other Materials Reviewed
(by type and number)

Material Type	Number
Zika literature (journals, online articles, and a book)	25
USAID program documents/strategies (frameworks, etc.)	23
IP work plans	45
IP yearly, quarterly, and monthly reports	50
IP assessments/research	24
Meeting reports	5
Tools and training materials	20
Total reviewed	192

The evaluation team conducted seven briefings/informational interviews and 110 in-depth interviews (the respondent distribution is shown in Table 3). The online surveys were sent to 212 individuals (including 63 USAID and 149 IP staff). Of these, 25 USAID and 63 IPs staff responded, for response rates of 40 percent and 42 percent, respectively. To reach the online survey respondents, USAID sent an initial invitation, since an email from USAID was less likely to fall into a respondent’s spam folder. USAID followed this up with reminders.

Table 3. Key Informant Interviews, by Location¹⁸

Organization/Country	Number of Interviews
USAID/Washington, D.C.	14
IP headquarters	20
Colombia	9
Dominican Republic	15
Guatemala	35
Jamaica	11
Paraguay	6
Total Interviews	110

LIMITATIONS

Methodology limitations include the use of convenience sampling, limited in-country time, the uncertain availability of stakeholders, and the team’s inability to travel within areas of some countries and to Honduras (as originally planned) due to security and other concerns. In addition, low response rates to the online surveys may affect result interpretations.

¹⁸ Includes group interviews for Colombia, Guatemala, and Jamaica. Of the 64 IP respondents, 22 came from the headquarters/regional level. USAID and IP respondents at the country level are presented together in this table to avoid potential identification of individual respondents.

Purposive sampling: To address the evaluation questions, with USAID’s assistance, key informants were drawn from a purposive sample. The purposive sampling was also limited based on the availability of respondents. The evaluation team made every effort to ensure the sample of key informants was representative, and included trainees, community workers, local officials, nongovernmental organization (NGO) representatives, and researchers, as well as others not working with USAID. In the field, this was supplemented by observations to validate information provided by key informants.

Limited in-country time: Nine days with three evaluation team members in Guatemala was sufficient time; however, once the evaluation team divided into pairs for the remaining countries, time constraints were felt in the Dominican Republic (six days), Jamaica (five days), and Paraguay (two days). Given the rapid pace of implementation and conflicting requirements—e.g., an audit of the Zika response—extending in-country time was not an option. In Jamaica, the evaluation team directly observed VC and community engagement activities, while holding interviews with key stakeholders on the rest of the program. In the Dominican Republic, the team directly observed service delivery activities and SBCC message development while holding interviews with key stakeholders to cover other elements of the response. In Paraguay, the evaluation benefited from having strong pre-briefings on VC and commodities prior to travel, and excellent stakeholder and government discussions during the short visit. That said, additional observations in Paraguay would have been useful, such as observing improvements in service delivery near the border with Brazil.

Uncertain availability of stakeholders: Lists of key informants and survey respondents were generated by USAID and reviewed by the evaluation team. USAID noted the priority key informants. Informants were notified in advance, and efforts were made to meet at their convenience, whenever feasible. GH Pro provided assistance to locate interviewees, and the evaluation team worked with USAID to ensure all priority respondents were reached. At the headquarter levels of USAID and the IPs, it was difficult, even over a three-month period, to get key informant interviews slated with all potential interviewees. In several cases, those who could not be reached for an interview answered the online survey and provided useful comments. Utilizing both methodologies in the evaluation allowed for greater input from more stakeholders.

At the field level, in Guatemala, the evaluation team was not introduced to the national leads for VC or maternal, neonatal, and child health (MNCH), but did meet the national lead for communications, who was a key in-country counterpart for the response and for UNICEF. From meetings with PAHO, two IPs, and local government officials in two provinces, the team was able to piece together the national situation in the country and possible national-level commitment to VC and service delivery.

Travel affected by security concerns: In July 2018, the evaluation team was scheduled to travel to Honduras, one of five countries receiving a full-package of assistance under the Zika response. Honduras was to be used as a basis of comparison for other countries, and all four team members were together to develop a uniform evaluation approach before separating into teams of two for the remaining four countries. However, due to a transport strike and ensuing protests, the trip to Honduras was canceled at the last minute. With USAID’s assistance, travel was redirected a week later to Guatemala. Guatemala served as a good substitute for Honduras, as it also receives a full package of assistance. However, due to this delay, one team member was not able to travel to Guatemala, resulting in a lost opportunity for the full team to work together in a country; the team compensated by having a debrief call with her. This also resulted in the team being unable to meet with the USAID regional coordinator for Central America and the Dominican Republic, who is stationed in Tegucigalpa, Honduras. To address

this issue, the team conducted two in-depth telephone interviews with USAID response representatives in Honduras.

Travel within Guatemala was planned to avoid areas that presented a security threat. Although the team missed seeing first-hand the security constraints faced by IPs, key informants who experienced security difficulties were interviewed.

IV. FINDINGS

Findings are based on reporting and responses from all respondents and, in some cases, from direct observation by the evaluation team. Findings for Evaluation Question I are based on interviews and not survey data; respondents focused on the period before USAID's arrival. At times, the Findings section will include advice and suggestions from respondents. Following this section, overarching Lessons Learned, Conclusions, and Recommendations are provided for USAID, based on the entirety of responses to the five evaluation questions.

EVALUATION QUESTION I: WHAT ENABLED THE SUCCESSFUL ACHIEVEMENT OF PROGRAM OBJECTIVES AND WHY? WHAT BARRIERS HINDERED THE SUCCESSFUL IMPLEMENTATION OF OBJECTIVES AND WHY?

Enablers

National government engagement and leadership led to advocacy for regional mobilizations prior to the USAID response and laid the foundation for USAID-supported work. For example, support from the president of Jamaica, and, in particular, support from the president of Honduras to mobilize other presidents in the region, as well as support from civil society at the most local levels, led to the initial identification of potential partners and ministry offices that could participate in a response.

Government engagement motivated action not only within the public sector but the private sector as well. It was acknowledged that flexibility and the ability to find solutions within an emergency response were valuable; the public sector did not have the tools needed to provide a comprehensive response, and those they had were not as effective as in the past (e.g., insecticide resistance). In Paraguay, “champions” at the national and regional levels also helped to generate and maintain interest over time.

The Zika response was seen by many of the IPs and in-country respondents as an **opportunity to address the limits of existing health systems**, particularly in strengthening laboratory and diagnostic capacity through infrastructure and training, and in updating the technical and patient-friendly skills of MCH providers, including how to accurately measure head circumference. VC programs could also establish cadres of trained community volunteers.

Within countries, the **existing mechanisms and processes**, particularly multisectoral emergency task forces (often referred to as “mesas” in the Americas) that involved partners from national and community levels, helped facilitate the response coordination. For example, in the Dominican Republic, this group included the United Nations (U.N.) and international NGOs, as well as different ministry offices that worked with arboviruses, communications, education, and quality assurance. The result was a coordinated effort within the country wherein people knew each other and “who was doing what,” and duplication was reduced.

Existing **technical know-how** and past experiences with arboviruses, particularly dengue and chikungunya, served as a knowledge base for the response, since ministry programs at all health system levels could be mobilized to respond, even when early knowledge about Zika and its impact was still low. As noted with the Dominican Republic example above, previous experience facilitated the response because people knew each other and were aware of who was doing what. In some cases, such as Jamaica, where the government was accused of an untimely and inadequate response to a previous chikungunya outbreak, Zika served as a motivator to become engaged and demonstrate action.

Dengue and chikungunya (and to a lesser extent malaria and the possible return of yellow fever) were often of larger concern in countries and communities that had experience dealing with the mosquito vectors, since, as one respondent noted, “With dengue, people die.” Nonetheless, some IP respondents felt that doors had been opened for messaging on Zika.

Regional networks and alliances facilitated the response. Stakeholders like the IFRC and U.N. organizations were already operating in countries, including Colombia, Dominican Republic, and Jamaica, when WHO declared Zika an emergency. These organizations were able to rapidly mobilize and address the situation. Long-standing relationships and collaborations meant countries could expect timely support from the organizations.

When the response commenced, in the countries visited by the evaluation team, information from regional partners like PAHO and the CDC served as the initial source for **information-sharing** on Zika, allowing countries to tap into **expertise on protocols and guidance**. When the Zika response began, for example, the University Research Corporation’s Applying Science to Strengthen and Improve Systems Project (ASSIST) used PAHO’s case definition for Zika surveillance among newborns. PAHO’s VC networks, such as the Arbovirus Diagnosis Laboratory Network of the Americas (RELDA),¹⁹ enabled countries such as Colombia and Dominican Republic to tap into technical expertise from the CDC, universities, and trained entomologists. Alliances like the LAC Neonatal Alliance²⁰ allowed countries to get information out effectively to society members. LAC region countries could also disseminate strategies quickly through the many relevant in-country and regional groups, such as midwife associations and family planning associations in the Caribbean.²¹

Existing experience with emergency response facilitated a timely response. UNICEF’s and IFRC’s public emergency work with earthquakes and yellow fever outbreaks, and their international networks, provided global and regional institutional experience to tap. These organizations also benefit from internal funding raised by donations. For example, IFRC’s emergency relief fund allows them to release funds to use in a manner that addresses immediate needs in a timely manner.

Barriers

Existing health system limitations were important barriers to the Zika response. Human resources for health and **high staff turnover** among stakeholders presented challenges for Zika programming. For example, one IP noted that their VC workers from a previous arbovirus outbreak decreased by 50 percent (from 1,000 to 500) when the government could not invest in integrating them into the workforce. Several countries have rapid turnover and frequent movement of staff; some have highly technical positions filled with unqualified persons. As one respondent noted, “A person who is an entomologist has to be an entomologist, not a politician.”

Limited diagnostic capacity and supply chain management also served as barriers to achieving Zika response goals and objectives. Laboratory capacity was strained in many countries. Several medical professionals, including those in Colombia, Dominican Republic, Guatemala, Jamaica, and Paraguay,

¹⁹ Established with PAHO support in 2008 with a focus on dengue, and with members in most countries in the Americas, including the United States (CDC), RELDA establishes regional frameworks, protocols, and research agendas.

²⁰ The LAC Neonatal Alliance, initiated by professionals from USAID, PAHO, and Save the Children’s Saving Newborn Lives project, was established in 2005 as an alliance to prioritize neonatal health in the LAC region.

²¹ Subsequent support to PAHO and the LAC Neonatal Alliance under the Zika response focused on strengthening technical guidelines in VC and MNCH, respectively, and sharing of technical evidence.

indicated that national laboratories could not handle the needed volume of testing. Reasons included having only one laboratory (Paraguay), no systematic testing (Colombia, Paraguay), unavailable reagents (Jamaica, Guatemala), and delays in or no testing.

On the family planning side, country contraceptive working groups, established in USAID-assisted countries as USAID phased out support for **family planning commodity support** a decade ago, were no longer functional, and there was a shortfall in United Nations Population Fund (UNFPA) condom donations.

People in the community complain that they go to the health center and they are not tested for Zika. Mothers want the test because they go to the center after we advise them to go. But they do not receive a diagnosis with the test for Zika. (“Las personas en las comunidades se quejan de que van al centro de salud pero no les dan el test de Zika. Las madres se quejan porque van al centro de salud después de recibir nuestro consejo de ir, pero no reciben el diagnóstico con el test de Zika.”)

—IP respondent

Important **socioeconomic and demographic factors**, as well as **government changes**, presented challenges. In some countries, such as Dominican Republic, frequent changes of responsible officials at the national level resulted in delays, as incoming individuals needed to be re-oriented. In El Salvador and Guatemala, such changes resulted in much time needed to get buy-in and engagement from the governments, or, as in the case of Ecuador, to get needed government approvals.

Violence at the community level, at times extreme violence at the hands of gangs, posed a threat to community-based work; some IPs reported that their staff, or staff working with local organizations, were victims of violence. Along with injuries, the situation caused work delays, and the need to identify ways to work around the situation. These solutions included establishing security plans, as in El Salvador and Honduras, and recruiting workers from the affected communities to enable access. Violence also affected research activities, and modifications were needed to account for the specific, inaccessible communities. These included reducing sampling frames, but with the resulting inability to gain representative samples.

Gender norms, such as the prevalence of “machismo,” increased women’s risk for both contracting and transmitting the Zika virus. Condom use in some countries was equated with both infidelity (Dominican Republic, Guatemala) and HIV (Dominican Republic, Haiti), and informants in some countries said that women with babies showing signs of microcephaly were at risk of being, or had been, abandoned by their partners (Colombia, Guatemala). Further exacerbating the situation, pre-response family planning materials indicated little, although much-needed, involvement of men (Dominican Republic, Guatemala).

Fear of negative economic impacts caused by disease outbreaks could affect government reputations—a health minister in one country was recently fired for not responding well to a chikungunya outbreak—and were seen by some partner governments as having an impact on tourism, an important revenue source for many LAC region countries. As an IP noted, “Zika was not very good for a country that depends on tourism, so initially there was a lot of resistance. This led to delays in disseminating messages as well as initially coordinating the partners.”

EVALUATION QUESTION 2: WHAT SPECIFIC PRACTICES AND FEATURES OF THE USAID ZIKA PROGRAM HAVE ENABLED OR LIMITED PROGRAMMATIC ALIGNMENT AND USEFUL INFORMATION SHARING AMONG PARTNER GOVERNMENTS AND IMPLEMENTING PARTNERS?

The findings reflect what USAID brought to bear to ensure programmatic alignment and information sharing among partner governments and IPs. Enabling factors identified include the financial resources themselves, USAID's success in tapping key human resources to manage and implement the response, the Zika advisors, and consulting advisors and regional coordinators. Regional planning and in-country Zika coordinators facilitated the process and allowed for integrated communication approaches with partners. Working with ministries at the national level, as was done in the response, is critical, as they manage and lead all national responses. In-country IP meetings, usually held every two to four weeks, were seen as very important for implementation by all respondents, and at the country level, participatory country planning and regional meetings that included government counterparts were found to be useful. Another popular mechanism for sharing information is the public website, Zika Communication Network, or the internal website, Zika Partners Communication Network, that serve as a nexus for communication. IPs in the field said the monthly summaries posted by other IPs were useful in order to know what others were doing; it was noted that the summaries were also relatively easy to complete.

USAID's ability to align and adequately share information was hindered by the timing of the USAID response, the lack of initial in-country situational reviews, the initial absence of a full-time response leader, USAID's procurement and contracting requirements, and the workplan process. Respondents felt that the centralized response limited IPs, Zika coordinators, and USAID missions, and they identified examples of both inflexibility and role/responsibility confusion.

Enablers

USAID's past regional and country experience and the various personnel with related experience enabled USAID to reconnect with ministries and other stakeholders with whom they had previously worked. Combined with **experienced, well-connected staff who understood the country context**, these aspects were instrumental in initializing the Zika response and building the required network among stakeholders at the country level.

Enablers included mission directors who understood the country and the region and who could leverage resources, Zika advisors who had established relationships with ministry officials, and key personnel within IP organizations. At the IP level, nationals serving as chiefs of party brought USAID and ministry experience to facilitate the process. This was seen, for example, in Paraguay, where there was no USAID Zika advisor, and an IP chief of party with extensive USAID in-country experience became a coordinating point of contact for the response. In Honduras, an IP was able to have quality improvement (QI) activities up and running within three months, largely because the IP team was able to recruit technical personnel familiar with the technical approach, government structures, and challenges from past USAID assistance, and who were able to orchestrate a rapid response that met country needs.

The COR and in-country Zika coordinator have demonstrated strong leadership in guiding the programming. There has been a deep understanding of the challenges and context, which has allowed the project to be more flexible and adaptive in its execution.

—IP respondent

Placing **Zika advisors** within countries facilitated coordination and reduced duplication. Those at the country level with USAID experience and country knowledge played a key role in the response and were seen as effectively coordinating the response. Interview respondents indicated that these advisors could also be instrumental in leveraging government engagement, which was more easily done when issues of importance to governments (e.g., health systems strengthening, care and support for children with disabilities) were part of the response. Coordination was most successful when clear roles and

responsibilities were assured, and all stakeholders were integrated into the response. The presence and experience of in-country Zika advisors helped field IP staff, and ensured that key government units were engaged with USAID and the IPs, according to respondents and observations.

Flexibility was cited as a key response aspect that enabled more timely and locally relevant action. This included allowing USAID staff to be based in different countries and travel regionally to provide support. Flexibility was closely linked to coordination, where, for example, monthly IP meetings allowed partners to share information and activity reviews. Thus, when duplication was identified, flexibility allowed plans to be modified. Such mechanisms also helped overcome resistance from government and regional stakeholders, which would have been problematic with a more rigid response. Similarly, flexibility allowed the integration of Zika messaging and activities into the wider arbovirus work already underway in countries, which again reduced resistance and provided an opportunity for countries and USAID to address needs.

Online survey results confirmed interview findings; roughly three-quarters of respondents (both USAID and IP staff) indicated that they agreed or strongly agreed with statements that the USAID response was effective in terms of flexibility, and that overall, USAID had done a good job in coordinating and collaborating to reduce duplication.

USAID respondents, however, tended to rate their agreement lower on these survey items. About 68 percent of USAID respondents indicated they agreed or strongly agreed with the statement on USAID's response being effective in terms of flexibility (compared to 80 percent of IPs); 59 percent reported they agreed or strongly agreed with the statement that USAID had done a good job coordinating and collaborating to reduce duplication (compared to 85 percent of IP respondents).

Interviewees indicated that the **in-country partner meetings** organized by Zika advisors, **regional meetings** organized by other stakeholders and the Washington, D.C.-based Zika program, and the internal **Zika Partners Communication Network** were all important response elements that helped in information-sharing while also helping USAID reduce duplication. For IPs and governments, regional meetings were seen as useful to move along policies and approaches.

The strategy, the National Strategy for Zika, came out of the meetings, and orders our work and organizes the work of those who help us.

—IP respondent

In Washington, D.C., respondents noted that individual focal persons for different **lines of effort** provided useful information for their response areas, although not always for decision-making. Meetings to discuss implementation progress and share regional information, often held weekly, helped to keep personnel abreast of developments in countries. Working groups helped partners understand their roles and responsibilities in their individual technical areas and provided a space to discuss duplication. USAID respondents felt that coordination provides more results than working as individual organizations. It is a challenge, however, to provide the partners with sufficient time to share information rather than imposing a strict time limit for presentations. As one IP put it, “At the IP meeting you feel overwhelmed by all the work being done; my story is just three minutes.”

Although IPs saw specific weaknesses related to Zika that required additional resources once they got on the ground, **financial resources** allowed countries to strengthen their existing responses, and as noted above under Evaluation Question I, to further strengthen health systems by improving laboratory

capacity and training of health professionals. One IP noted that if there are stable political and health systems, then countries can afford investment for Zika.

Limitations

While respondents were generally positive about USAID's attempts to achieve programmatic alignment and adequately share information, major limitations cited include the lateness of USAID assistance, the absence of initial in-country situational reviews that included engagement with governments, the turnover in response to leadership, and USAID's cumbersome procurement systems and workplan processes (which is outside the Zika response's control).

Emergency response does not sit in a silo. Disaster management is a cycle. Just responding is not sufficient.
—USAID respondent who filled several roles in the Zika response

The late start: USAID developed a response while the epidemic was underway in late 2015, and in February 2016, the U.S. administration requested LAC region Zika funding. Reprogrammed Ebola and other funds became available in April 2016, and Congressional approval of Zika funding came in September 2016. Despite relatively rapid hiring and accessing existing projects to focus on the response, the USAID response arrived in the field after the epidemic had subsided. This was exasperating for both IPs and USAID staff. In the online survey, close to 60 percent of USAID respondents indicated they either had no opinion, disagreed, or strongly disagreed with the statement that the response was efficient and effective in terms of timeliness. That is, while USAID and headquarter IP respondents were aware that USAID was constrained by a long delay in receiving Zika response funding, Zika assistance did arrive late in the outbreak timing in partner countries.

IPs found that the initiation of response activities after the epidemic's peak was challenging, especially for introducing VC and SBCC activities. Still, according to IPs, service delivery that worked with existing public sector maternities and non-government family associations was easier to initiate due to the legacies of USAID and the IPs in the region.

SBCC IPs were met with low levels of perceived risk as the response got underway. Governments gave little or no attention to Zika as a separate health threat, citing more serious and fatal problems, such as dengue. Some IPs were asked by governments to integrate communication messages on Zika into general messages about arboviruses or general family planning, an approach the Zika response team later found useful as a way of sustaining the strengthened systems. Respondents in Central America and the Caribbean said governments were concerned about the loss of tourism that Zika messages might cause. Of the five countries visited for this evaluation from July through October 2018, only in Paraguay did the evaluation team observe specific signage in the airport related to the risks of Zika for pregnancy outcomes, although a USAID respondent reported seeing signage earlier in the Dominican Republic and Guatemala.

USAID had no recent history of working on outbreaks with VC assistance until the Zika response, and the Agency was met with questions about why USAID had come after Zika had subsided and why it had not helped with dengue or chikungunya. Nonetheless, while assistance for VC was welcomed, the regions targeted for Zika were often those most affected by dengue and chikungunya, and it was difficult for in-country counterparts to understand the rationale to focus on Zika instead of all arboviruses. Health services had an easier time addressing the virus as Zika's effect on pregnancy and children became better understood. National and sub-national level counterparts expressed interest in learning

to identify cases of congenital malformations resulting from Zika, and the care for affected infants and children.

Finally, the response timing was thought to have negatively affected partner governments' motivation and cooperation to streamline the acceptance of condom donations and insect repellents, especially repellents that are categorized as commercial commodities.

Lack of initial, overall, in-country assessment: While various systems for program alignment and communication, such as the country Zika team meetings, were viewed as useful during implementation, many respondents referred to the need for some kind of initial field-level visits, exploration, and basic assessment by USAID managers and experts planning the response, prior to finalizing the response plan. Given the health emergency, USAID could have used operating expense funds to initiate field visits and discussions with partner governments and GH experts in early 2016, prior to the availability of Congressional funding later in the year.

Little initial government engagement by USAID response leadership: Many respondents, both within and outside of USAID, including those present when USAID came into countries, said that USAID—referring to USAID/Washington, D.C.'s Zika response leaders—should have had substantive planning discussions with partner governments (e.g., health ministries) prior to finalizing plans. As a centrally funded and centrally managed response negotiation, commitments with governments were expected to come from USAID's Bureau for Global Health.

Many in-country IP representatives knew their government counterparts, and government officials confided in and worked with them, but some IPs said they were put in the position to initiate activities in their workplans with governments in their countries without USAID's Zika response leaders or representatives as the lead interlocutors with governments. For countries with Zika coordinators, this awkwardness was soon identified and alleviated.

In countries where MNCH, VC, and communication oversight occurs in different ministry units that do not talk with each other, having both initial and ongoing communication with USAID was seen as important. When Zika coordinators/advisors or PAHO helped to represent IPs in front of partner governments, the representation was seen as useful, but not as desirable as an upfront understanding between USAID and partner governments.

Little initial communication with and support to missions: USAID missions, responsible for USAID-funded activities in their countries, expressed two major concerns: 1) The lack of training funds, administrative assistance, and contributions to mission and embassy services for the Zika advisors and the response as a whole; and 2) The lack of budget reporting to the mission and embassy of funds expended in country. Noting Zika's newsworthiness, the need for funding for mission and/or embassy communication officers was a prominent concern. A USAID/Washington, D.C., respondent noted that field staff were left out of decision-making and did not receive sufficient support, such as money to travel to meetings. Some respondents felt that Zika advisors and the South American coordinator also needed assistance. One USAID respondent noted that, "PEPFAR [the U.S. President's Emergency Plan for AIDS Relief] has a team of 10, Zika has one." Several respondents said that the Zika coordinator for South America had a portfolio of countries that was too large and that necessary backstopping from USAID/Washington, D.C., was confusing at the country level.

The response did not follow normal protocols set by missions and embassies on budget reporting. Missions and embassies are responsible for knowing what USAID funding is coming into their countries,

and what institutions are receiving those funds. IPs found themselves in the middle of the Zika response, with management asking them not to share financial reporting and information with missions or embassies.

Zika leadership turnover: As noted in the background section above, the Zika response has a direct hire lead and full-time senior zika advisor, a pairing established in June 2018. Prior to this leadership pairing, there were both numerous turnovers in leadership, and leaders with only part-time status. Forty-one percent of USAID survey respondents disagreed or strongly disagreed with the statement that USAID’s response had been efficient and effective in terms of leadership, while 36 percent agreed or strongly agreed. One IP respondent said she could not answer the question because she could not tell how the response was led.

Limited and confounding factors in the Zika response tended to be associated with a lack of leadership, including uncertainties about authorities and responsibilities, a lack of training, direct hires with little USAID field experience, and a seemingly random assignment of roles. A more consistent leader could have strengthened transparency on important issues, such as travel, expectations of GH projects, and changes in roles.

Acquisitions and assistance²²: USAID respondents were pleased with the speed of the procurement process, noting the rapid hiring of institutional contractors and personal services contracts (PSC) when a hiring freeze was imposed for U.S. Government direct hire employees, and the quick turnaround of procurement actions in September 2016 when Congress authorized Zika funding. Those less familiar with USAID and its procedures felt it was slow, especially for an emergency response.

Individual IPs shared examples of how the procurement bottlenecks kept them from getting to the field or meeting objectives in their workplans. Approvals for raising funding ceilings and extensions took time and delayed responses, particularly in areas where multiple sub-partners were engaged.

Commodity procurement²³: On average, the procurement and delivery of insect repellents and condoms through the GHSC PSM program took approximately two years. This is faster than the normal three-year procurement cycle for the GHSC PSM program, and GHSC PSM had never purchased repellents in the past. Requirements within partner countries also slowed the process, and commodities were not aligned with the activities they were scheduled to serve.

“Notwithstanding” language: IP respondents asked if some of the delays and challenges they experienced, including unexpected costs and access to commodities, should merit invoking “notwithstanding” contract language, and noted that the rationale for not using it was not explained. USAID respondents explained to the evaluation team that, following Congressional intent, USAID was only using the language for national security-oriented activities.²⁴

Workplans: Workplans reviewed by the evaluation team included countries and areas within a country that IPs planned to cover, and/or their overall activity plans. Most were organized on an annual basis, and included details on how progress would be measured. Considerable overlap or disconnects among

²² Includes grants, buy-ins, and task order contracting, and an IAA with the CDC.

²³ Includes commodity procurement through GHSC PSM and Abt Associates’ Zika AIRS Project (ZAP).

²⁴ USAID invokes notwithstanding language during international disasters, other emergency circumstances, and circumstances involving exceptional foreign policy sensitivities. The USAID Office of U.S. Foreign Disaster Assistance (OFDA) generally manages these activities. It is not used specifically for pesticides.

IP workplans were found; for example, several IPs, including UNICEF, have SBCC experience in the LAC region, and each felt this was their natural area of focus under the Zika response. The community engagement IPs also worked on SBCC and VC.

Once in the field, problems of overlap tended to be addressed at the country level as they arose, either through partner meetings or individually when a Zika advisor was present. Zika advisors reported that while there was flexibility in how IPs could be directed within their workplans, they could not move funding from one IP to another, nor could they drop an IP that was overlapping the work of others.

Additional confusion arose among IPs when multiple IPs received awards to perform overlapping work, when support outlined in various workplans was uncertain between partners, and when multiple knowledge, attitude, and practices [KAP] studies were undertaken by different partners covering similar issues.

—USAID respondent

A common refrain from respondents discussing the overlap of IP workplans was that there were too many knowledge, attitude, and practices (KAP) studies being undertaken.²⁵ Breakthrough RESEARCH (BR) was tasked with reviewing the various KAP methodologies.

EVALUATION QUESTION 3: HOW HAS THE USAID ZIKA RESPONSE STRENGTHENED AND SUPPORTED EXISTING VECTOR CONTROL, SERVICE DELIVERY, OR SOCIAL AND BEHAVIOR CHANGE COMMUNICATION SYSTEMS?

USAID supported a large body of VC, SBCC, and service delivery capacity-building and support; this was done through training, demonstrations in facilities and communities, the development of tools and evidence-based approaches, and research that emphasized behavior change. Respondents indicated that they believed this work was leaving comprehensive capacity in partner countries; this was measured by achievements in capacity-strengthening, as opposed to population-based targets.

In the online survey, 76 percent of IP respondents agreed (45 percent) or strongly agreed (31 percent) with the statement that the USAID response had (or was) leaving capacity in place at the country level for future responses.

At the time of this evaluation, USAID was collecting and processing consolidated M&E indicators from the 14 IPs implementing field activities under the Zika response.²⁶ USAID provided the following findings for three key areas of activity for 12 countries:²⁷

- 33,965 persons trained in VC, including persons newly trained in chemical VC. Training included larviciding and adulticiding, non-chemical VC such as environmental cleanup and larval source reduction, insecticide resistance testing, entomological surveillance, entomology, and warehousing/inventory management for VC commodities. (Individuals are only counted once in the total numbers trained.)
- 13,716 health providers trained in Zika prevention counseling for women of reproductive age (facility or community-based).

²⁵ The Zika response team lists five IPs completing KAP surveys on its research list; the Population Council's Breakthrough RESEARCH (BR) initial mapping listed eight KAP studies.

²⁶ KAP activities found in ZAP, ASSIST, MCSP, PSI, UNICEF, BR, Johns Hopkins University Center for Communications' Breakthrough ACTION (BA), CARE, Global Communities, MCDI, PADF, SSI, and Save the Children.

²⁷ The eastern and southern Caribbean are not included, as work in these countries began later.

- 6,878 communities with members actively participating in monitoring, prevention, and/or support activities.

These indicators are part of a Zika M&E framework that uses a modest number of indicators to measure “increased community engagement with measures to prevent Zika and improved quality of Zika prevention and treatment services.”

Vector Control

Eight IPs participate in community-based VC along with local governments and/or NGOs. Abt Associates’ Zika AIRS Project (ZAP) is the only partner cleared by USAID to use larvicides that require the proper mixing of potentially toxic chemicals; the seven community engagement IPs—CARE, Global Communities, IFRC, MCDI, PADF, SSI, and Save the Children—focus on the use of ovitraps²⁸ for VC measures of progress. All the VC IPs appeared to conduct monthly visits to households after initial introductions into the community, and VC groups depended on working with local leaders.

(Our work includes) visiting households on a monthly-based, environmental clean-up, teaching household members about the mosquito cycle, and applying non-toxic larvicides.

—IP headquarters respondent

We were not an SBCC partner, but our VC included SBCC. Our entomologists make the connection with the community. A monthly visit is what any MOH can do.

—IP headquarters respondent

The technology of ovitraps used to monitor and reduce vector populations continues to evolve, and during the response, countries showed preferences for different approaches. One IP field respondent noted, “although ovitraps are better than larva indexes, they are not necessarily good.” Partner governments also had preferences. Honduras used *Bacillus thuringiensis israelensis*; Nicaragua did not. MCDI found El Salvador was comfortable with ovitraps, but had to demonstrate the benefits of the technology at the community level in Guatemala.

Indoor residual spraying (IRS), while not a centerpiece of the VC strategy, was popular with some governments, and the Zika response emphasized the training and demonstration of its safe and effective implementation. ZAP reported that a large cadre of men and women was trained in the first year, including community-level IRS. For example, in the Dominican Republic, 135 persons (121 males, 14 females) were trained to deliver IRS,²⁹ while in Guatemala, 165 persons were trained.³⁰ Bolstered by this and other increased capacity in target areas in both countries, structures sprayed with IRS covered 71,000 residents.³¹

Respondents saw the **continuity of human capacity development** as key to meeting the Zika response objectives, although they reported little emphasis was put on sustainability until later in the response. Once trained, respondents said they believed some of the VC-trained persons in the Dominican Republic will be absorbed into ongoing national and local programs, while in Guatemala, budgetary constraints were often mentioned as a barrier to continued activity. The beginnings of continuity were evident in the Dominican Republic. During the six-month period prior to this

²⁸ An ovitrap device consists of a dark container with water in it and a substrate/surface where mosquitoes can lay their eggs. The device is designed to mimic where a mosquito would want to lay eggs.

²⁹ ZAP Dominican Republic, end of year report, January 1–December 31, 2017, pp. 17-18.

³⁰ ZAP Guatemala, end of year report, January 1 – December 31, 2017; pp. 17-18.

³¹ ZAP Dominican Republic, p. 17; ZAP Guatemala, p. 17.

evaluation, ZAP Dominican Republic supported the training of a second cohort of 30 privately financed participants, and the completion of a model for a center of excellence.

Entomological surveillance capacity was seen as particularly important by PAHO, CDC, and partner government respondents working in infectious disease, as both a way for preparing and responding to Zika and other arboviruses in the future, and for keeping track of resistance to larvicides. As respondents noted:

Value was in country-specific activities based on their needs . . . and in using entomological data and seeing that the chemicals they are using is having an effect. Some countries may have faced challenges at the beginning, and others that came later, like Jamaica, had the benefit of learning from them. —USAID headquarters respondent

[the] greatest contribution has been in the development/strengthening of entomology/VC in (country) through driver activities: capacity building at local levels in entomology and VC, and strengthening of regional entomology labs, which were in poor shape. —USAID field respondent

In the Dominican Republic, 99 persons (mostly female) were trained as entomological team leaders and technicians, and in Guatemala, 18 persons were trained to conduct entomological surveillance.

Service Delivery

Communication about or training in prevention counseling for women of reproductive age in facilities was provided by ASSIST, Johns Hopkins University’s Jhpiego Maternal and Child Survival Program (MCSP),³² PSI, CARE, IFRC, and PADF. ASSIST focused on building QI capacity for Zika among teams of medical professionals, hospital staff, counselors, and social workers in facilities, and between facilities and communities.

Table 4. Service Provision Assistance and QI Training, through September 2018

Country or region	Health facilities	QI coaches trained	QI teams formed	Providers trained
Dominican Republic	17	18	52	1,342
Ecuador	21	4	42	285
El Salvador	87	68	54	2,396
Guatemala	263	34	57	1,391
Honduras	47	38	116	2,157
Nicaragua	65	135	65	1,787
Paraguay	68	7	41	661
Peru	32	6	11	57
English-speaking Caribbean ³³	170	25	139	216
TOTALS	770	335	577	10,292

Source: USAID ASSIST project, Annual Performance Monitoring Report, fiscal year 2018, p. 103.

The **QI coaches and QI teams** are seen by hospital staff and government respondents as critical to continued strengthening of the quality service delivery and links between facilities and communities needed to care for Zika babies as they return to their families and grow. Developing QI teams required

³² In Haiti, under the Services de Santé de Qualité pour Haïti (SSQH) Project.

³³ Includes Antigua & Barbuda, Dominica, Jamaica, St. Kitts & Nevis, St. Vincent and the Grenadines.

structural policy changes within facilities and ministry approval. Establishing these teams is key to the continuity of QI approaches for Zika in partner countries. Table 4 shows 10,292 health providers and 577 multidisciplinary QI teams positioned to continue serving after the response.

Challenges included that many health practitioners did not know much about Zika, and that health practices require maintenance to ensure consistency over time. USAID responded with training and the development of new or updated tools and approaches, such as adding Zika information to pregnancy wheels, measurement tapes, and training to standardize microcephaly clinical diagnoses. IPs also provided capacity-building in guideline update processes and building coordination mechanisms.

In some cases, past USAID investment in QI approaches was leveraged, as in Honduras, where earlier USAID assistance in QI helped the MOH develop a central structure to measure quality. In other settings, such as Guatemala and Paraguay, government MNCH officials were embedded in the country ASSIST project to learn and develop the post-response approaches they would use.

Respondents said they favor the **comprehensive strengthening of service delivery** by the Zika response. Service areas commonly noted as having benefited from the Zika response included MNCH, family planning, and women's health. Programming allowed messages to be reinforced, and, for example, strengthened the activities related to women's health and newborn care, with the ability to identify suspected Zika cases (microcephaly). The Zika response experience in the Dominican Republic provides an example of a comprehensive approach for MNCH and family planning, and the challenges that remain for decision-makers, such as encouraging condom use in pregnancy and the costs of care for those affected by microcephaly.

The Zika response enabled new programming to be tested and scaled. For example, family planning associations working with the Zika response began working with men on preventing sexual transmission of Zika to female partners. In the Dominican Republic alone, the family planning association counseled more than 2,000 men. As one respondent noted, "Zika consultations are part of their everyday family planning consultations."

Nevertheless, physicians, counselors, and local government officials said that getting couples to use condoms during pregnancy is difficult: the concept is new for any culture, and measures of success are elusive in the short run. Condom use in general is low; fewer young people are using them than in the past and, even for HIV prevention, men are using pre-exposure prophylaxis (PrEP) but not condoms. Success in this behavior change hinges on the Zika response approach, which is for service delivery IPs to train providers with both knowledge and patient-friendly skills, and to bring women together with their husbands, especially as part of community programs, to talk about using condoms during pregnancy.

Dominican Republic: MNCH and Family Planning during Zika

When Zika hit the Dominican Republic in 2015, the concept of VC was fairly easy to understand. As one respondent explained, “My first word was Daddy and my second was dengue.” Knowledge about sexual transmission and Zika and its effect on pregnancy outcomes was much more difficult, and remains so. Early messages were confusing, public support for travel bans fluctuated, and telling people to not get pregnant appeared to be counter to basic human rights.

The Zika response work in MNCH and family planning brought clarity, technical contributions, and capacity-strengthening in the following areas:

- MCSP assessed sonogram equipment and the training needs in 17 facilities.
- PROFAMILIA counseled 6,000 women of reproductive age and 2,000 young men and husbands of pregnant women, as well as pediatricians, ob/gyn’s, and ultrasound technicians.
- QI approaches brought in 17 facilities in 5 regions and linked to communities.
- The CDC followed 45 children of mothers with Zika for 18 months, and ASSIST has a database of 161 Zika-affected children; UNICEF is expected to keep tracking these children.
- A 2018 UNICEF and Oxfam* study on the costs of care and support for children and families will be used to help key decision-makers understand their options for care.

A recent study highlights a formidable response obstacle: pregnant women, their husbands, and non-pregnant woman are still unclear about the connection between Zika and sexual transmission, although they are current on five VC behaviors. Still, men equate condoms with infidelity; few men say they would even consider using condoms to protect their families or would attend an antenatal care visit.

*Oxfam and UNICEF, 2018, Impacto socio-económico de SCZ. Desireè Luis, Septiembre 2018, Percepciones sobre los comportamientos de prevención relacionados con el Zika en la República Dominicana: Hallazgos e implicaciones de un estudio cualitativo.

Source: Breakthrough ACTION (BA). Conducted in communities where the Save the Children community action on Zika project operates.

Social and Behavioral Change Communication

Seven IPs report on the number of “community members [who] actively participate in Zika monitoring, prevention, and/or support activities”: CARE, Global Communities, MCDI, PADF, Save the Children, SSI, and ZAP. Community-level capacity-building revolves around engaging community members and volunteers to disseminate prevention messages, as well as to control and monitor mosquito populations. This includes moving messaging beyond “what” to “how.” Core to these efforts was the identification of seven key behaviors, including using condoms to prevent transmission and following recommendations for care of water containers. Guidance on messaging for these behaviors continues to be rolled out within the response.

SBCC activities also helped strengthen networks and share skills and approaches in the field, such as CARE’s *Juntos ante el Zika* (Together against Zika), which supported the creation and validation of communication tools by using design thinking and target audience participation to ensure the appropriateness of messages and tools across several countries. Similarly, programs in Colombia, working across different IPs, built on existing, strong community relationships and reinforced the value of sustainability and volunteerism. These approaches emphasized the importance of looking at community values and, as stated by an IP in Jamaica, showed the ways that community involvement and ownership are needed.

At the community level, respondents noted how the Zika response allowed for more active engagement with community members across activity areas. Additionally, improved programming, increased volunteers, and strengthened health committees were all benefits cited by USAID and IP respondents. Respondents found the Zika response served to reinvigorate national and community-level SBCC capacity in countries such as Honduras and Guatemala.

Having too many messages became a concern in the first year of the effort, and USAID responded with a response-wide effort, presented in the box below, to ensure evidence-based messages were promulgated.

Behavior Messaging Matrix: Useful but Late

The first year of the Zika response revealed that there were too many behavior change messages being used, and some were not accurate. A comprehensive analysis of the literature and the expertise of IPs combined to produce evidence-based guidelines to achieve the following seven message subjects:

1. Personal protection from mosquito bites.
2. Use of condoms during pregnancy to prevent sexual transmission of Zika.
3. Regularly removing unintentional standing water inside and outside the home, and in communal areas.
4. Covering water storage containers at all times with a tight-fitting cover that does not warp or touch the water.
5. Scrubbing walls of water storage containers weekly to remove mosquito eggs.
6. Seeking prenatal care to monitor pregnancy and discuss Zika risk and prevention.
7. Seeking counseling from a trained provider on modern family planning methods if not planning on getting pregnant.

A matrix allows users to assess a behavior's efficacy, flexibility, potential to reduce transmission, frequency required to be effective, and the ease of access to materials required. BA and BR took the lead in developing the matrix, with participation from all IPs.

One government official turned the matrix into her own communication guidelines for Zika; two IP teams incorporated the recommended messages into their community work; another IP reviewed messaging to check whether USAID-supported work was following the guidance.

This guidance came after activities were already on the ground. Some field volunteers said the messages were not appropriate for their communities (e.g., women did not go to antenatal clinics), and some did not like being told what would work in their own communities. Survey respondents said the guidance and matrix were useful but came too late, and there was confusion in the field as to whether using all seven (some said six) behaviors was mandatory, or whether USAID wanted feedback on how the messages worked for different communities.

Sustainability and Service Delivery Integration

The integration of Zika control into broader health areas was an important element of the response and was reported as a significant contribution toward sustainability. Zika VC was integrated into arbovirus activities; QI for Zika was integrated into antenatal, MNCH, and disability programming and support; and condom use during pregnancy was integrated into family planning programs.

In most countries, this integration allowed the Zika response to gain more interest and commitment from U.N. partners and national and local governments. It also seemed rational to communities. One IP reported how the integration of VC into the national educational curriculum was one of their biggest achievements. Another discussed how linking Zika with other themes had more impact on reproductive health. Others discussed the connections between children with disabilities and education, and how Zika-affected children can be included.

A long-term contribution being pursued by both ZAP and ASSIST is engaging medical experts from public and private hospitals and universities as trainers or advisors.

The box below provides an example of integrating Zika into existing systems and the opportunities for sustainability.

Paraguay: Integrating Zika into Existing Programs

Despite impressive economic growth, Paraguay has a very high maternal mortality rate. When Zika arrived in 2015, the country was unable to pinpoint or identify cases of Zika. USAID/Paraguay asked to be added to the Zika response and was brought in at a “moderate” level, and a successful approach followed.

The USAID/Paraguay mission director secured an entomologist from the U.S. Naval Medical Research Unit in Peru (NAMRU-6) to work with local labs and a consultant to assess health sector capacity. Input was shared with the USAID Zika team in Washington, D.C., to help determine the assistance needed. The mission helped identify an in-country point person from ASSIST who understood USAID and was able to work well with UNICEF, the Ministerio de Salud Publica y Bienestar (Ministry of Public Health and Social Welfare), the Ministry’s Servicio Nacional de Erradicación del Paludismo (National Malaria Eradication Service, or SENEPA), and other stakeholders. As USAID had no mission health program or Zika advisor in Paraguay, the ASSIST point person became key in facilitating coordination. The IP work focused on country needs:

- Short-term assistance and training provided by ZAP to SENEPA, the government counterpart agency, fueled improvements in the agency’s own capabilities and systems as it entered a period of stronger leadership.
- Weaknesses in prioritizing work and human resources in the ministry were partially met by seconding six ministry doctors to work directly with ASSIST. These doctors were scheduled to return to the ministry with strengthened capabilities in Zika and QI.
- Local work, especially in Ciudad del Este along the Brazilian border, helped to improve existing health capacities, such as care for and reporting microcephaly among newborns and children.
- UNICEF was reaching communities, local groups, and schools, and had plans to incorporate Zika prevention and care into larger, ongoing early childhood development publications and programs that will outlast the USAID response period.

Additional Findings from Zika Response Implementers

The following findings were not part of surveys or questionnaires, but each emerged in discussions with several respondents in different settings.

Understand the political climate and political motivations: Understanding on-the-ground politics, especially at the sub-national level and in areas where USAID does not normally work, was important to IPs. In one country, the MOH decided not to accept an insect repellent already available in the local market, while in other countries the MOHs helped push through product registration waivers so the Zika response could proceed. MOH field workers in one country said they did not support a new VC initiative (i.e., *Wolbachia* bacteria) for fear of losing their jobs.

At the local level, actions and motivations varied significantly. One municipality demonstrated commitment by seconding staff, but another pushed an IP to support unqualified local government officials. In yet another country, local officials just wanted the national government to test samples.

Individuals can make a difference: Individuals matter, in particular those who have the motivation, skills, and personalities to push issues of interest forward (i.e., program “champions”). Government officials who have raised Zika to national attention and action or helped develop and implement strategies were singled out by respondents as key to sustaining momentum. Examples included three

country presidents; selected national government officials in communication, VC, epidemiology, and neonatal health; and a few local officials, including a mayor. Several IP champions who acted as a convener of other IPs surfaced in the field by helping another IP work to improve prevention messages, or strengthening links with a regional donor. Several Zika advisors and regional leads were lauded for “above and beyond” or “heroic” work as it related to aligning the work of IPs or representation before government officials. In Paraguay, an engaged mission director set the course for a clear and well-rounded response.

Different IP mixes are useful to countries: Most respondents said there were not too many IPs, yet the mix of IPs was a concern to some. IPs said larger partners tended to overshadow smaller partners, and MOHs did not understand the need for so many partners, some of whom had not been present before. Some of the smaller projects that were carried out without much publicity may not have been needed, or overlooked possible synergies. Respondents also noted that local partners could have been used through a different funding mechanism, while others said it was unnecessary to have several groups working on the same tasks.

All the IPs have experience with health communication. While workplans may have aligned the needs of the response and designated the SBCC leads, some moves to develop messages regionally were confusing and in one case, left an IP without a niche.

Communities need different approaches: Training and fielding volunteers or IP staff into communities requires an understanding of community characteristics and behavior. Rural issues were not always the same as urban issues, such as the levels of rainfall and varied practices for catching it (or not); situations where both household partners were working during the day, especially in urban areas; and the presence of organized crime, and if and how to work around it. The intensity and timing of USAID involvement varied by country, or even within a country. For example, in Guatemala, USAID had a health program active in some Zika-affected communities, and no involvement with others, which made the introduction of the response more difficult. IPs responded with efforts to recruit volunteers from smaller geographic catchment areas so they would be known by households, and paired men and women volunteers to better address security and have women volunteers available to consult with women in the households.

Commodity planning must predate a health emergency: Community programs felt their work was weakened by not having insect repellents and condoms. Both were part of the messaging provided by the Zika response, but for most countries in the program, the arrival of these commodities lagged, and some were only just arriving at the time of the evaluation. Partner governments further slowed the process in many countries. Some IPs said they should have been able to buy their own commodities; others said that alternative buying mechanisms should be developed to have health commodities on hand, similar to those of the USAID Office of U.S. Foreign Disaster Assistance (OFDA) or U.N. organizations.³⁴

There was also general agreement that the technologies to prevent or diagnose Zika are not adequate for low-income settings. Some implementers do expect that a Zika vaccine will become available. USAID and CDC respondents showed concern that some countries have only an initial experience with human papillomavirus (HPV) vaccines and still experience difficulties with antiretrovirals for third-line patients,

³⁴ Recently, the USAID Bureau of Global Health entered into a UNICEF facility agreement for the purchase of diagnostics (e.g., test kits and materials), including those for Zika, and have used similar agreements for avian influenza.

but there is a sense that introducing a Zika vaccine will be easier. As one respondent noted: “They can handle vaccines through their expanded immunization program.”

The technical knowledge of front-line workers is valuable: Community engagement groups working in two countries without a VC element described how they learned to make ovitraps. Both used a trial-and-error method (one using YouTube as the design source), and were finally successful. In another country, a community engagement group that will remain in the country after the Zika response felt that they would receive the same SBCC training provided to government officials. The team observed a case in which volunteers and workers in a community engagement program noted concerns about the use of larvicides and appeared to lack information on USAID’s use of larvicides and the precautions in place.

EVALUATION QUESTION 4: USING ZIKA AS A CASE STUDY, WHAT DID USAID CONSIDER IN MAKING PROGRAMMATIC DECISIONS FOR THE ZIKA RESPONSE AND WHAT ADDITIONAL INFORMATION WOULD HAVE BEEN VALUABLE FOR THESE DECISIONS? BASED ON THIS EXPERIENCE, WHAT CRITERIA SHOULD USAID CONSIDER IN MAKING PROGRAMMATIC DECISIONS DURING A HEALTH EMERGENCY RESPONSE?

Most responses addressing Evaluation Question 4 came from leadership of the USAID Bureau for Global Health and Zika team members. Additional responses were used to develop the conclusions and recommendations section of this report.

Informed decision-making

USAID staff in both Washington, D.C., and the field said they first learned about Zika “like everyone else,” through news reports about the virus and microcephaly in Brazil. Almost immediately, information on the history and path of the disease (i.e., the *Aedes aegypti* mosquito), risks and preventive methods, and the effects of Zika on the unborn were being discussed in embassies and missions in the LAC region, as well as the LAC and Bureau for Global Health in Washington, D.C. Missions started tracking the situation and reporting to the LAC Bureau. Field respondents reported that the CDC, which had an existing presence in the region and was focused on Zika in the United States, worked with PAHO to provide government ministries with information.

In late 2015, the National Security Council convened an interagency meeting to discuss Zika and the U.S. Government response. According to attendees, various federal agencies (National Security Council, U.S. State Department, USAID, U.S. Southern Command, National Institutes of Health, and CDC) were represented; Peace Corps was not. USAID technical and communication officers participated and USAID’s Office of Legislative Affairs (LEG) was involved in numerous updates, as Congress was under pressure because, as one Bureau for Global Health respondent noted, “they hadn’t acted quickly enough for Ebola.”

Meetings organized by USAID and others provided important information and perspectives useful in response planning. Beginning in late 2015, USAID’s Zika response team organized meetings with colleagues both inside and outside the government who were working on Zika, in infectious disease, entomology, and VC, to discuss the characteristics and control of the virus. WHO/PAHO provided U.S. Government agencies with technical information at other Zika-related meetings. A USAID staff member attending these meetings noted that “there was a distinct moment when it became clear that Zika could

be sexually transmitted,”³⁵ and the CDC began recommending condoms during pregnancy and postponing pregnancy for women living in or traveling to Zika-prone areas. As awareness of the outbreak’s extent grew, messaging (both proactive and reactive) among USAID/Washington, D.C., leadership and their internal and external contacts, including those in the field, provided rapid and current information about the situation and events on the ground, albeit not always in a coordinated fashion.

USAID officials trace the rationale for involvement in Zika back to, first, seeing babies with microcephaly and knowing USAID could help; second, the interagency process that suggested there was an important niche for USAID in the LAC region; and third, WHO’s warning and the February 2016 PHEIC. Under the direction of senior Bureau for Global Health officials, the Global Health and LAC Bureaus formed a task force to develop a response to Zika. The result was an administration request to Congress (see the background section above) that led to one year of funding using predominantly unused Ebola funds, and eventually to two additional years of funding, once the administration request was authorized and approved by Congress in September 2016.

Learning from the Ebola experience

A key concern for GH, especially for those who worked on the West Africa Ebola virus disease response, was to learn from the Ebola experience. This learning affected the Zika response in three major ways:

1. USAID Bureau for Global Health received the funding and managed the entire response.
2. Zika funds, including those reprogrammed for Zika from other sources, were used exclusively for centrally funded instruments, with no funds moving to USAID missions.
3. Technical and managerial lessons learned from the Ebola response were incorporated into the Zika response.

Bureau for Global Health leadership: OFDA funded and led the Ebola response, with both GH and Africa bureau participation. Senior USAID officers reported that a Government Accountability Office audit team found that the tri-bureau approach was confusing and inefficient.

For Zika, the LAC and Global Health bureaus acted as co-leads throughout the design stage in late 2015 and early 2016. As LAC is the bureaucratic home for USAID missions and the bureau representing USAID in the region, communications regarding USAID intentions with partner governments’ needs and actions moved through the LAC Bureau. Once the funding and management was clearly tasked to GH in spring 2016, this bureau became the de facto lead.

USAID has since provided guidance for responses to infectious disease outbreaks³⁶ under four possible scenarios: Scenario A: an outbreak that is not a PHEIC, in which GH is the technical lead; Scenario B: a PHEIC, but not a humanitarian crisis, in which GH may expand a response between USAID/Washington, D.C., and missions; Scenario C: a PHEIC and humanitarian crisis in which OFDA takes the lead; and Scenario D: a USAID response to major outbreaks that occur in settings that have a preexisting or likely

³⁵ The first confirmation of sexual transmission of Zika came from a U.S. scientist returning from Senegal who infected his wife in Colorado. B. D. Foy, K. C. Kobylinski, J. L. Chilson Foy, B. J. Blitvich, A. Travassos da Rosa, A. D. Haddow, et al. (2011), Probable non-vector-borne transmission of Zika virus, Colorado, USA. *Emerging Infectious Diseases*, 17(5), 880–82. <http://dx.doi.org/10.3201/eid1705.101939>

³⁶ USAID. (Oct. 31, 2018, rev.), USAID/General Notice. *USAID Response to Global Infectious Disease Outbreaks*.

U.S. Government disaster declaration due to an ongoing humanitarian crisis and/or conflict, but do not merit the PHEIC.

Use of central mechanisms: USAID funded and managed the response centrally. Central programming of the Ebola funds used, and the Zika funds themselves, made it easier to account for when reporting to Congress or undergoing audits. In contrast, in the Ebola response, a mix of funding sources was used. Beyond learning from the Ebola response, Bureau for Global Health respondents felt their bureau was the right technical home for the Zika response given its experience and existing programming in health systems strengthening, maternal and neonatal health, reproductive health, VC, SBCC, innovations, and community engagement for health.

Technical and managerial lessons: USAID respondents who oversaw or worked on the centralized design of the Zika response cited technical and managerial lessons learned from the Ebola response that USAID attempted to replicate when they designed the Zika response. While improvements were made, elements of the Ebola response deemed successful for information exchange and tapping the private sector were replicated, including:

- A weekly bulletin modeled after an Ebola version, which was developed by a USAID staff member to inform the senior leaders in LAC and GH, and the USAID Administrator. The bulletin was updated with data from extant sources, including a PAHO weekly brief and U.S. Department of Defense briefs.
- Internal web-based communication, which was used initially for constant disease-, programmatic-, and research-sharing among Zika response managers.³⁷
- The inclusion of the Grand Challenges innovation grants, with more of a focus on marketability.

Countering the perceived problems in the Ebola response, GH also incorporated:

- An emphasis on health system strengthening over emergency assistance to better enable partner countries to handle the next emergency.
- SBCC as a key, cross-cutting area, to strengthen accurate communication and ensure that prevention behaviors can continue beyond the response period.
- Research to understand behaviors and impacts.
- Streamlined M&E indicators for Congressional reporting.
- Clearer response management, including a core management group, regional and country advisors, and IP and regional meetings, including USAID, IPs, and partner government representatives.

While many respondents agree that the elements listed above were pursued, some noted concerns with how they were interpreted or implemented. For example, two respondents noted that research on behaviors occurred but did not happen up front:

³⁷ Later, Johns Hopkins University's Center for Communications' Knowledge for Health (K4H) program was asked to develop what is now the Zika Partners Communication Network, the internal platform for USAID and IPs exchange of programmatic experience, as well as an external, public platform (Zika Communication Network) for information about Zika and the USAID response.

“The Ebola Virus Disease lesson learned was to have anthropological studies up front to understand behaviors we may not be asking about, but it didn’t happen.” —IP

“As someone coming off of Ebola going into Zika, (we) haven’t benefited from what we saw in Ebola; Ebola (and Zika) had no research at the beginning.” —USAID/Washington, D.C.

Additionally, various USAID respondents voiced frustration with the inability to change the level of effort of individual projects within the Zika response or to move resources from one project to another. Most traced the problem to USAID’s procurement system and the time it takes to raise a ceiling or to de-obligate and re-obligate funds from a project. A few respondents noted that the Congressional requirement to obligate Zika funds quickly stifled flexibility, and had GH not been vigilant, could have led to leftover funding as occurred during the Ebola response.

The task force and their decisions

Key Bureau for Global Health and LAC Bureau staff began meeting as a Zika task force late in 2015, with managers from the Global Health and LAC Bureaus and the LEG office participating. Initially, the task force was led by a senior Bureau for Global Health official; leadership soon passed to a full-time, direct hire Global Health lead with relevant technical, regional, and managerial experience. Some members were invited, while others came to share their experiences in other infectious³⁸ disease outbreaks, especially Ebola. Respondents estimated that there were anywhere from 35 to 70 staff intermittently participating. One respondent noted a common refrain shared at meetings: “In Africa we do it like this.” Zika team respondents explained that the situation became time-consuming and non-productive, and lauded a task force lead for disinviting extra staff from meetings. After that, morale improved, and it became clear who was actually on the team.

The Zika task force became the Zika core team, and tapped centrally funded mechanisms. It was important to clarify early what the project would do, and what the LAC Bureau experience and availability would be. For example, it was clear to task ASSIST with improving the quality of Zika-related maternal and neonatal services. IPPF’s role was also clear in the provision of family planning and tackling the challenge of counseling Zika-affected couples to use condoms during pregnancy. An APS grant competition was used to attract NGOs working in the region, and what was described by respondents as a cumbersome expansion of a task order with a malaria project operating throughout Africa was used to obtain VC assistance.

PAHO, UNICEF, and IFRC—all present and already working in the LAC region—were brought in easily via public international organization (PIO) grants, and the IAA with the CDC took only two days to negotiate. USAID projects eventually tapped for the Zika response came from five Bureau for Global Health offices. However, core team members reported that getting to the final project slate often involved difficult trade-offs caused by the absorptive capacity and procurement schedules for the various projects.

Both Bureau for Global Health and field staff noted that field staff were consulted, albeit selectively, on different elements of the design. This included past and present work done by the various IPs, but no first-hand mission or partner governments were involved in the design process. In addition, no GH/ID

³⁸ Fiscal year 2015 funds had to be obligated by September 2016, and fiscal year 2016 funds by September 2017, despite implementing an emergency program through 2019.

leaders or task force members undertook exploratory visits to the countries being considered for assistance.

Staffing the response: The first challenge was how GH/ID would second or hire staff to manage the implementation of the response. This was accomplished by focusing the search on the availability of personnel with Spanish language skills, and relevant technical and LAC region experience. Several respondents noted that while GH/ID provides existing staff for a variety of health emergencies (e.g., different Ebola outbreaks and the plague), this response was unique given its relatively longer time span, and thus it required new staff.

In 2016, three institutional contractors were hired as technical advisors in Washington, D.C.: two in the LAC Bureau, and the third to work on social and behavior change. In 2017, a community engagement technical advisor was added. None of these new, Washington, D.C.-based personnel had direct hire authority. A specific attempt to hire an entomologist in Washington, D.C., failed due to the lack of hiring authority, and later, an attempt to second a specialist from another federal agency fell through. In the field, persons with USAID, technical, and LAC region experience, as well as staff new to USAID, filled what were mostly new PSC positions.

For the future, two options for health emergencies not available when the Zika response began were discussed: the Emergency Reserve Fund, used for supplementary funding in 2017 for the plague in Madagascar and for a recent Ebola outbreak in the Democratic Republic of the Congo (DRC), and the new Sustaining Technical and Analytical Resources (STAR) project launched in May 2018, to tap university and international technical expertise. Bureau for Global Health respondents agreed that the Emergency Reserve Fund could have been used flexibly by the Zika team for costs, but not for personnel. STAR is very new, but given its network and possibilities for seconding technical staff, respondents felt it might have helped access the entomological assistance needed.

Zika response lead: When the original, full-time Zika team lead departed, senior Bureau for Global Health officers stepped in as part-time leads while managing their own full-time jobs, which included tending to other health emergencies in Africa. As outlined in Evaluation Question 2 above, USAID and IP respondents in Washington, D.C., and the field said that this lack of a continuous leadership led to confusion and a deficit of clear, informed decision-making. While several USAID respondents were adamant that the leadership changes could not be helped (because of the hiring freeze, other emergencies, and overextended staff), many respondents felt that having a single, empowered leader was key to a health emergency response.

Internally, the issues are largely in D.C. and not the field... In year 2, [there were] six team leaders [with] no Terms of Reference, so this was added into people's existing roles; the idea was to hire a team leader but it wasn't prioritized.

—USAID field respondent

An additional human resource issue raised in Washington, D.C., involved coordination within USAID with the Office of Acquisitions and Agreements (OAA). Respondents said they felt that OAA gave no consideration to speeding up or prioritizing Zika response actions involving IPs, despite the importance of timing in a health emergency. In contrast, the IAA with the CDC for numerous research activities under the Zika response was negotiated by an office of the general counsel lawyer who understood global health programs and previous global health interagency partnerships with the CDC; the entire process took two days. Similarly, hiring institutional contractors to manage various technical elements of the response often, but not always, proceeded quickly.

Additional Comments from Respondents

Beyond the design steps discussed above, respondents shared other design elements they felt could have helped in the implementation of the Zika response and would be useful in future emergencies. Some of these elements have been discussed above in Evaluation Questions 2 and 3 (e.g., USAID should undertake exploratory visits, and integrate better with USAID missions). Other suggestions included developing a rapid deployment unit in GH/ID; establishing SOPs for health emergencies, including how to handle commodities, M&E, and core research needs; and ensuring new USAID staff are trained in USAID roles (e.g., interacting with IPs and governments, AOR/COR roles, Bureau for Global Health and agency resources, and the global and interagency health networks in which USAID operates).

Several respondents felt the Zika response’s “notwithstanding” language could be used for a variety of purposes, such as hiring, travel, and local purchasing. Senior USAID managers explained that the language is customarily not used for meeting general programmatic needs, including staffing.

EVALUATION QUESTION 5: USING ZIKA AS A CASE STUDY, HOW DID IMPLEMENTATION AT EACH LEVEL (COMMUNITY/LOCAL, NATIONAL, AND REGIONAL) CONTRIBUTE TO MEETING USAID’S GOAL, AND HOW COULD THIS IMPLEMENTATION INFORM FUTURE HEALTH EMERGENCY RESPONSES?

This evaluation occurred close to the end of USAID’s Zika response, while USAID was in a final push to inform training structures, guidelines, and processes moving forward; most respondents had worked across or understood what had happened during the response at the regional, national, and community/local implementation levels. All respondents said each implementation level was necessary to achieve the response goal, and most said national-level engagement and decisions at the national level were the most important of the three levels for meeting objectives and for sustaining USAID’s investment within the health system in LAC.

Regional Responsibilities and Contributions

WHO and PAHO played a **prominent normative role**, along with others, prior to and during the Zika response, and this was expected to continue post-response, although other regional contributions were also cited. When respondents discussed regional-level Zika response actors, they generally spoke about the roles of WHO,³⁹ PAHO, and UNICEF, and many also mentioned the Council of Ministers of Health of Central America (COMISCA), and the Caribbean Public Health Agency (CARPHA). Contributions identified included a wide range of activities, but generally fell into categories consistent with the organizations’ specific capabilities regionally, and their normative function of advising leaders in countries. For example:

Overall, PAHO, UNICEF, COMISCA and CARPHA are seen as partners who, because of their participation in the USAID response, will help sustain its contributions.
—USAID HQ

- WHO and PAHO sent out regional health alerts on Zika, including an epidemiological alert on Zika virus infection (May 7, 2015), an epidemiological alert asking PAHO member states to report observed increases of congenital microcephaly and other central nervous system malformations under the international health regulations (November 17, 2015), and an alert noting the association of Zika virus infection with neurological syndrome and congenital malformations in the Americas. The alert included guidelines for laboratory detection of the virus (December 1, 2015). PAHO briefed LAC governments on the PHEIC, and encouraged calls for action such as “La semana de

³⁹ WHO and PAHO are often referred to as WHO/PAHO in the LAC region.

Acción contra los Mosquitos” (the Week of Action against Mosquitoes) in Central America and the Caribbean, including calls from governments and other stakeholders.

- As an example of consolidating and sharing evidence, PAHO, along with the CDC, developed a key paper on new technologies that featured items impregnated with insecticides, and shared guides for evaluating VC technologies. Another example is a 2018 PAHO plan of action for entomology and VC for the Americas, and a strategy was anticipated to be disseminated at the time of the evaluation. COMISCA and CARPHA were seen as organizations that help countries coordinate and learn, similar to the Zika response regional meetings in that they allow government representatives to see what others are doing. As one IP noted, “At the regional level, the collaboration and creation of networks is important because there are few donors, so partners need to collaborate and work together. This is very important, especially in the LAC region. It’s not the same as Africa, where it is not so easy to create these networks.”
- PAHO and CDC technical guidelines were made available and used during the response by ASSIST and ZAP to harmonize technical approaches for the response, and for future work by partner governments. PAHO supported IP approaches in VC and service delivery in front of governments. WHO and UNICEF materials were similarly used by SBCC IPs for methodology guidance for undertaking KAPs.

Regional organizations acting as implementers were informing, educating, assisting, or coordinating with national-level stakeholders to bolster their health systems’ capacity and reach. UNICEF’s work in the response included direct community engagement and SBCC work. Other organizations, such as IFRC, the Pan American Social Marketing Organization (PASMO), and Save the Children worked regionally under the response as well.

IPs and USAID field respondents, especially those focused on SBCC and community engagement, saw UNICEF as “a better partner than PAHO” and were confused about PAHO’s role. PAHO was supported by USAID under the Zika response to conduct specific pilot studies, prepare guidelines, and hold meetings related to VC, but that was separate from the work of in-country PAHO representatives who were advising governments and cooperating with the Zika response as part of their normal duties. Zika coordinators helped to clarify the in-country roles of UNICEF and PAHO.

National Responsibilities and Contributions

Engaging at the national level was necessary and critical for the Zika response, as this level is responsible for the leadership, surveillance, policies and guidelines, budget, infrastructure, human resources, and public dissemination necessary to respond to a health emergency. The national level was regularly referred to as “MOH” throughout the national health apparatus in LAC countries, although they have various names and structures. The Zika response also worked with other national entities, such as education and social security agencies.

Both regional and sub-national/community levels wanted the attention and action of the national level; much of the response period attention was on how the national level (i.e., the national government) could sustain the strengthened capacity provided under the Zika response. USAID respondents in the field noted having worked with the MOHs in many areas, and said that most program successes came from this level.

As LAC region countries began to feel the effects of Zika, several national governments and their health ministries took charge. In Nicaragua, for example, the president’s office led regular meetings with the head of the Surveillance and Public Health units at the MOH, and political and technical willingness to

address the effects of Zika was publicly evident. In the Dominican Republic, the MOH organized a technical committee to develop strategies with the involvement of WHO, USAID, the national health service, and specialized agencies; the committee adopted the international strategies and adapted them to the Dominican Republic. In Honduras, the day after WHO declared an emergency, PAHO Honduras staff went to see the Honduran president; the government warned the population via radio, and initiated IRS.

In Guatemala and the Dominican Republic, international and national NGOs participated as advisors to governments through ad-hoc and existing NGO-government platforms. In Colombia and Guatemala, national family planning associations were consulted by government officials as the Zika epidemic began, prior to USAID's work.

As the epidemic passed its peak and the Zika response began, the high-level leadership emergency response became less urgent in tone. The Zika response strengthened, assisted, or engaged with the full spectrum of responsibilities of the national level during health emergencies. Assistance with the **development of policies and guidelines** was designed based on in-country demonstration and analysis. For example, ZAP trained personnel in provinces to conduct entomologic surveillance as a model for national adoption. Zika quality assurance work at government hospitals led to guidelines in which all women will receive information about Zika, and staff will work as a team to provide various messages. Demonstration of actions was important because policies were often not enough. As one field-based IP noted, "governments need help with problem-solving around guidelines. National guidelines exist, but for one health area, the government did not have one of the three medicines in their guide."

Yet some of this problem-solving required cooperation and leadership beyond the MOH, as one in-country respondent noted: "The social safety net is not catching up. Insurance does not reimburse for Zika because it was new, so doctors were reporting it as hemorrhagic fever." This was making it even harder to track a disease that respondents said was not being adequately identified through testing, even in Colombia. Aside from testing for Zika, governments realized they needed surveillance of congenital abnormalities, including syndrome neurological syndrome (Colombia, Paraguay), and standard measurements of microcephaly (Dominican Republic).

The national level is responsible for **health budgets, infrastructure, and human resources**. USAID and IP respondents in the field noted the importance of pairing with government workers to show what was tenable to strengthen capacity in VC, service delivery, and community engagement, while taking care not to provide solutions that would overextend the respective government capacity. For example, during field visits, the evaluation team found:

- For VC, in the Dominican Republic, the government appeared to be poised to hire VC-trained personnel, while in Guatemala, the local government and IP respondents said they did not believe the government had the resources to maintain the VC activities.
- In Paraguay, six government officials were given leave to work with the service delivery IP, and are expected to return to government posts after the response.
- In the Dominican Republic, hospitals assisted by the Zika response expected to continue to cover Zika-related issues in pregnancy, delivery, neonatal assessment, and care with trained staff and reporting systems, through the QI teams developed under the Zika response and sanctioned by the government.

The Zika response team and MOHs worked together through such challenges as donations of insect repellents and condoms when staff turnover of national officials slowed the process, or when it was found that repellents were categorized as commercial and not health products.

Public health dissemination is an important national-level responsibility. Many MOHs asked IPs to integrate Zika messages into more general arbovirus or family planning messaging, although some chose a focus on Zika's impact on pregnancy outcomes. At times, however, it was difficult for governments to be approached by IPs. In one case, UNICEF had already helped mount a communication campaign prior to the Zika response, and in another a respondent reported pitching a campaign to a government, only to realize that the MOH had not been brought in earlier for comment or guidance. Zika coordinators helped clarify government needs, and useful strategic dissemination did occur. For example, in Guatemala, a compendium on reproductive health legislation for legislators and other stakeholders now includes a chapter on Zika.⁴⁰

For the national level, **data and analysis for decision-making** is important. For example, the evaluation team heard from researchers within and outside of governments that BR was improving capacity and training in research, such as geospatial mapping and analysis, and mathematical modelling, and the CDC was providing reusable equipment for Zika and other VC research and software.

Sub-National and Community Level

Prior to the Zika response, several NGOs, such as World Vision, Plan International, and Save the Children, became active in Zika at the local level, as did family planning associations and Red Cross teams. Many of these organizations used WHO/PAHO and the CDC for information, and governments encouraged this participation. The Zika response was designed with **community engagement as a cross-cutting line of effort**. While a cadre of community engagement IPs were singularly focused at the community/local government level, other IPs also expended a considerable amount of effort in or with communities and local governments. IPs working at the community level reported that they either coordinated or actively collaborated with local government officials, community leaders, and individuals in the community. IP respondents noted the importance of linkages with national and sub-national government agencies.

Linkages either existed or were made with local health agencies and, for school-based programs, with educational institutions, to staff and facilitate the implementation of community engagement activities. For community engagement work by existing community development organizations, linkages with other development agencies within local or national governments, such as for rural water or social security, already existed. Red Cross societies and volunteers tapped by IPs for community engagement tended to be known by local and national governments from earlier work on other issues in the communities.

IP respondents stressed that when challenges arose, **having national support was helpful**. For example, when an IP was asked by a local health official for a letter from the health minister before allowing work in the municipality, having national support (and an effective Zika coordinator) proved valuable. And often, community-level work was directed from the national level, such as in the Dominican Republic, where the MOH asked an IP for assistance with ovitraps in specific communities. VC at the local/community level required national and local government collaboration or approval, as

⁴⁰ The compendium was supported by USAID/Guatemala (Bureau of Global Health Office of Population and Reproductive Health's health policy project), with Zika response assistance for the Zika chapter (ASSIST).

well as specific national government involvement in decisions about repellents and, for ZAP, larvicides. VC projects used local recruits and volunteers, or worked through local governments and community groups to identify who would be educating, providing the tools, and keeping track of progress. ZAP also had local health officials seconded to their district teams.

In the service delivery programs, it was **important to set up effective referral systems from communities** affected by Zika. For affected women and children, this required links between community members (a person or a small group) and local government hospitals to ensure that women and families received care in pregnancy and delivery, neonatal assessment, and later tracking and care.

V. CONCLUSIONS AND RECOMMENDATIONS

LESSONS LEARNED

Prior to sharing formal conclusions and recommendations below, the evaluation team wished to share key lessons learned derived from implementer comments presented above under Findings, which are particularly relevant to future multi-country health emergencies that GH may be called on to lead. In general, the lessons learned are more specific than the recommendations presented later, and are posited for USAID's future implementation as useful or relevant.

Evaluation Question 1: What enabled the successful achievement of program objectives and why? What barriers hindered the successful implementation of objectives and why?

- **Partner government commitment, informed support, and existing health emergency response platforms enable a response.** High-level government attention to Zika in selected countries and existing health emergency mechanisms (e.g., *mesas*) that convened key government and donor representatives enabled more effective start-up and implementation.
- **Weak health systems and supply chains are limiting factors in a health emergency and need to be addressed as part of the response plan.** USAID was met with more outdated and weaker health and supply chain systems than expected, and often siloed VC, neonatal and maternal health, family planning, and health communication, which required updating and training as the response proceeded (e.g., neonatal diagnosis; Zika prevention).

Evaluation Question 2: What specific practices and features of the USAID Zika program have enabled or limited programmatic alignment and useful information sharing among partner governments and implementing partners?

- **Direct assessment and planning with governments of countries/areas of a health response is key to initiating a partnership, smooth implementation of the response, and sustaining the benefits of assistance.** The Bureau for Global Health Zika response leadership should have directly engaged with partner governments and conducted on-the-ground assessments in February 2016 when the U.S. administration sent the first request to Congress for Zika funding, and/or when WHO's secretary general made the PHEIC announcement.
- **USAID's reputation as a global health and development agency provides access during a health emergency.** USAID's long-standing experience and reputation in LAC and the funding level of USAID assistance facilitated implementation, even in countries where USAID health assistance had phased out, despite arriving near the end of the epidemic.
- **A response benefits from dedicated in-country or regional response coordinators/points of contact.** Zika response regional and country coordinators, and the regular country meetings of IPs they chaired, were integral to the management, activity alignment reporting, and positive interactions with governments throughout implementation. Zika coordinators would benefit from administrative support.
- **The response management team and USAID mission/embassy countries need to agree on reporting and assistance requirements early on.** Zika response missions identified the need for training, and administrative and communications assistance for Zika coordinators. Missions

and IPs were confused and missions were disappointed before GH came up with an agreed-upon plan for in-country response activity financial reporting.

- **On-going internal communication is needed in a health emergency.** For the Zika response, internal USAID communication, USAID and IP web-based platforms, and regular IP meetings allowed Zika response implementers to share technical and programmatic information, best practices, and research findings in a timely basis.
- **Continuous, empowered leadership is necessary in a health emergency.** Initially, the Zika response had various leaders, some of whom had other duties. This slowed decision-making, and IPs felt they were not heard by leadership.
- **Health emergency responses require procurement and workplan procedures relevant to the response's time constraints and technical coordination needs.** Management and implementation in the Zika response was slowed and confused by cumbersome IP procurement and workplan procedures that isolated each IP's planning process.

Question 3: How has the USAID Zika response strengthened and supported existing vector control, service delivery, or social and behavior change communication systems?

- **Health emergency support and strengthening should be implemented within existing emergency response and/or health systems when at all possible.** The integration of Zika control into broader health areas was an important element of the response and was reported as a significant contribution toward sustainability. VC activities from Zika were integrated into arbovirus activities. QI activities for Zika were integrated into antenatal, MNCH, and disability programming and support. Condom use during pregnancy, promoted through the Zika response, was integrated into family planning programs.
- **Centralized health emergencies require the rapid provision of commodities and the ability to change budget allocations among projects.** For a large portion of the Zika response, commodities were not available in concert with the programmatic activities they were designed to support. Additionally, Zika coordinators reported a need to change the allocation of resources (i.e., budget levels) among IP projects, a process that could not be completed during the life of the response.
- **Sustaining the contributions of a response is not a replication of USAID-supported activities, but is indicated more by long-term activities based on response contributions.** In the Zika response, this can be shown by strengthened capacity in entomology, quality assurance teams, prevention messaging for Zika, and care and support for infants and children with congenital defects and their families.

Evaluation Question 4: Using Zika as a case study, what did USAID consider in making programmatic decisions for the Zika response and what additional information would have been valuable for these decisions? Based on this experience, what criteria should USAID consider in making programmatic decisions during a health emergency response?

- **Learning from earlier health emergencies is important.** Designers of the Zika response learned from the recent Ebola response in West Africa, which influenced them to centralize funding and management for GH response and use this bureau's mechanisms for technical assistance. They

also developed internal communications to share technical and programmatic updates. Nevertheless, under both Ebola and Zika responses, USAID did not conduct needed formative research at the onset of the outbreak.

- **A response design team must quickly cull information and make decisions. This requires a relatively small, full-time technical team, which includes representatives from LEG, office of the general counsel, and OAA to offer advice and liaise with their respective offices.** Many personnel participated in the early planning meetings—many with Ebola response experience—and considerable communication went back and forth between Washington, D.C., USAID mission staff, and others in the LAC region. Eventually, a structure for communication developed and the response plan was finalized. OAA was not represented in the design team, and the office of the general counsel was brought in for specific activities (e.g., negotiating the IAA with the CDC). LEG was kept in the communication loop.

Evaluation Question 5: Using Zika as a case study, how did implementation at each level (community/local, national, and regional) contribute to meeting USAID’s goal, and how could this implementation inform future health emergency responses?

- **It is vital to identify and articulate the key level of engagement in a response to most appropriately engage with each level, and to provide a focal point for sustaining response support and strengthening in public, NGO, regional, and academic health systems and initiatives.** For LAC, the Zika response worked at all three levels, with the national level being the focal point in charge of health responses, policy, guidelines, resources, and engagement with the other levels.

CONCLUSIONS AND RECOMMENDATIONS

The conclusions and recommendations are overarching and based upon information gathered through interviews, surveys, and document review, as well as the evaluation team’s own observations and experiences. For the most part, evidence for these conclusions and recommendations is drawn from a synthesis of findings in the prior section.

The rapid-paced Zika response is scheduled to end in September 2019. In an effort to be immediately useful to USAID, recommendations for the first two conclusions are actions the evaluation team believes can be completed prior to the end of the Zika response. The remaining two recommendations are offered for future health emergencies. Summary tables with condensed findings, conclusions, and recommendations comprise Section VI of this report.

Conclusion 1: USAID’s Zika response in the LAC region did “support and strengthen systems for priority countries in their Zika response effort in order to minimize negative pregnancy outcomes.”

As described across several of the questions presented in the Findings section, the Zika response updated and strengthened host country capacities in VC, service delivery for women and babies at risk, and prevention behaviors for Zika, in cooperation with governments and local communities. Work was completed by experienced organizations using evidence-based approaches. These activities occurred under a tight timeframe at a particularly awkward time, after the epidemic had largely passed, and while the international health community and the U.S. Government were still learning about the virus. The response goal was met, despite various challenges in implementation.

USAID assisted governments in integrating Zika into arbovirus vigilance and programming, and establishing specialized training in entomology and tracking insecticide resistance. Introducing the QI approach into prenatal, pregnancy, delivery, and neonatal care and follow-up for Zika, as well as bringing men in as partners in Zika prevention prior to and during pregnancy, have strengthened countries' Zika response, and also provided models for improving the delivery of family planning, maternal health, and neonatal services in general. This integration has likely facilitated the absorption of innovations, and the strengthened capacity will enable partner countries to better respond to Zika in the future.

The three-year Zika response ends later in 2019, and no funding is anticipated for any further work or transition. At this time, it is important for USAID to concentrate on how countries will sustain the strengthened systems, including services for the families and babies affected by congenital malformation syndrome caused by Zika. It is also important to understand that "sustaining the strengthened systems" does not necessarily mean continuing all the strengthening activities currently being implemented; rather, USAID and partner governments need to identify how the trained staff, training programs, quality assurance teams, approaches, guidelines, and networks developed under the Zika response will be put to use for prevention and care in the future.

The evaluation team observed that Zika response support for family planning associations during the first year of the response fortified these organizations' understandings of and commitments to incorporating Zika prevention into their services. The trajectories for other traditional public health concerns, such as VC and MNCH, will require more government involvement, but are still tenable (e.g., governments hiring or re-hiring personnel with Zika experience; university training programs; continued quality service delivery with the integration of Zika).

A newer and much more difficult health challenge, however, will be care for children affected by Zika as they grow. Most promising in this area is the integration of Zika-affected children into UNICEF initiatives for early child health or children with deformities, and more specifically, continuing to track children affected by Zika. USAID has initiated formal discussions with PAHO, UNICEF, and the USAID Wheelchair Program,⁴¹ much of which is directed at tracking and caring for children affected by Zika. The evaluation team was told that the CDC plans to continue following cohorts that were part of the IAA under the Zika response, and NIH may follow some cohorts with a view toward developing a vaccine. Together, these next steps are useful and tenable.

As the Zika response team completes final analyses and reporting on response indicators, and plans for final dissemination and legacy products, such as the final report to the U.S. Congress, it would be useful to discuss the Zika response accomplishments and experience with two key audiences: 1) The partner governments and technical leaders in Zika response countries, most of whom will continue to be responsible for Zika; and 2) USAID mission leadership in other regions, who will need information about the Zika response experience to inform their own activities.

As discussed in Evaluation Question 5 in the Findings section, the role of the national government in the Zika response is key to the success of USAID's goal to assist and strengthen systems. Yet as the response began, USAID let the IPs handle initial planning with governments. As the Zika response ends, there is a chance to rectify this rather quiet entry.⁴² Country-specific discussions between Zika response leaders and partner governments regarding accomplishments and country plans going forward could

⁴¹ Initiated in 2007, this program is managed by USAID's Center of Excellence on Democracy, Human Rights, and Governance.

⁴² Jamaica is an exception, as the Zika response leadership engaged and planned with the Government of Jamaica.

signal the completion of the Zika response in a clear, respectful, and productive manner. These discussions could also provide final insights into country-specific capabilities for any future health emergencies in the region.

For USAID missions around the world, hearing directly from GH/ID about health emergencies, including the Zika response, will likely be more valuable than sending reports or online information links. This dissemination could occur during mission director meetings or health officer state-of-the-art meetings. Briefings could include key materials that the Zika team chooses to highlight, such as the M&E plan, the behavior matrix, and key findings and research by IPs, global challenges grantees, and the CDC; briefings could also share information about USAID policy and special mechanisms, but the focus would be on directly sharing the experience and answering questions. As GH takes on its relatively new role as the USAID point for infectious disease health emergencies,⁴³ this also gives USAID personnel an introduction to contacts within USAID they may need to call on.

Recommendation 1a: The Bureau for Global Health Zika team and IPs should finalize plans for completion, hand-off, and/or integration of Zika response capabilities for each partner country.

Recommendation 1b: GH/ID should ensure that USAID conducts closeout dissemination and/or discussions for Zika response countries with partner governments and/or key stakeholders.

Recommendation 1c: GH/ID should disseminate information on the Zika virus and the experience of the Zika response to USAID missions, including presentations and discussions that include GH/ID and Zika team members.

Conclusion 2: External and internal online communication networks served USAID, IPs, and other stakeholders well throughout the Zika response.

As noted in particular under Evaluation Question 2 in the Findings section, the Zika response team, their field colleagues, and IPs shared, through both publicly accessible and internal web pages, activity and meeting reports, tools, and general technical information through the Zika Communication Network (www.zikacommunicationnetwork.org) and Zika Partners Communication Network websites, respectively.⁴⁴ Many materials were in both English and Spanish. IPs and USAID participated in providing input to the network, and USAID has been careful to review materials and follow up on any gaps found to ensure that a full presentation of the Zika response is available. Despite a large audience tracked electronically, no evidence is available as to whether the public Zika Communication Network is used by partner governments; there is the potential to link to partner government relevant websites.

The Zika Communication Network has important use beyond the Zika response as a detailed repository of technical and programmatic experience on Zika supported by USAID. It has been reported that a similar network used for the Ebola response was frozen. There are no funds to continue supporting the Zika Communication Network beyond the response; options for retaining this comprehensive knowledge and experience in a useable format should be investigated and, if done, it would be useful to have quality control mechanisms in place to ensure the quality of the information provided. Since there likely will be no Zika funds for this continuation activity, developing alternative

⁴³ USAID, *USAID Response to Global Infectious Disease Outbreaks*.

⁴⁴ The Zika Partners Communication Network also shared monthly field reports, audio transcripts or notes on internal meetings, and guidance for IPs.

funding sources could be considered by GH/ID: this could include integration with other information networks within GH.

Additionally, many LAC region ministries, including health, social security, and education ministries, have used and continue to use online technical information and communication systems for public and internal use. Having the Zika Communication Network available to government partners to provide experience, materials, and tools developed under the Zika response, as well as information about new technologies for Zika, would help to reinforce the capacity strengthened under the response.

Recommendation 2a: GH/ID should ensure continuation of the content of the public Zika Communication Network prior to the Zika response's end, including quality control mechanisms for accurate and timely information.

Recommendation 2b: The Zika response team should work with key government counterparts to provide Zika Communication Network materials, tools, and training examples for online use on host country systems.

Conclusion 3: Procurement and budgeting requirements had a limiting effect on activities at various stages of the Zika response.

As described above in the findings section, especially under the "Limitations" section of Evaluation Question 2 and the "Learning from the Ebola experience" section of Evaluation Question 4, commodities procurement and budgeting/legislative constraints challenged the implementation of the Zika response. These constraints require careful consideration and attention before engaging successfully in future health emergency responses.

It should be noted that GH had no stockpiles of insect repellent or readily available condoms for emergency use. The GHSC program had never procured repellents, and the purchase of condoms by GHSC PSM is normally a three-year procurement cycle. Zika response countries were able to receive condoms in two years and, after a new procurement, the response was able to deliver repellents, although very late. While the tenacity of the Zika response staff members and their colleagues is admirable, not receiving commodities in time during a health emergency is not acceptable. Future emergencies may require higher quantities and kinds of commodities (e.g., vaccines, diagnostics, and/or medical equipment).

On the whole, initial procurement actions—buy-ins, the IAA with the CDC, program grants, and PSC contracts—proceeded per normal timelines, with some working faster (IAA, PSC contracts), and some slower (agreements extensions, new contract actions within a contract). During implementation, however, a mix of slow contracting action and budget constraints in the form of Zika response funding caused bottlenecks that in many cases were never solved. For example, levels of funding provided to one IP needed to be moved to another IP, a contract needed a few new positions not covered in the original budget, and an IP needed equipment to evaluate infant hearing and eyesight. These needs were not met because moving funds and making changes once a procurement was in place was not tenable in an emergency timeframe.

Innovative mechanisms such as the emergency fund exist but need to be bolstered to become more flexible and to handle programming, staffing, and travel costs necessary when GH/ID responds to multi-country, multi-year health emergencies such as the Zika response. A more robust revolving fund model may be useful; however, it would require commitments to continue funding once existing funds were

used over the medium- and long-term. As private sector support for health emergencies is assessed, models for sharing the burden with the private sector, much like some global challenges or development credit fund approaches, may be useful.

Additionally, in future health emergencies, GH/ID should continue to take advantage of the flexible financing offered by international agencies, such as the IFRC, UNICEF, and others to fill gaps. For example, GH/ID has begun to improve rapid access to commodities and equipment for neonatal care through a facility in cooperation with UNICEF. This represents a good start. Similarly, strategic systems-strengthening, as the Zika response did for entomology and surveillance labs, is important within any emergency effort challenged by infectious diseases.

USAID health emergency assistance emphasizes evidence-based interventions and systems-strengthening, and would benefit from review after a response ends. For example, in the Zika response, it would be useful to follow-up after a six-month or one-year interval, to assess sustained capacity, review the completion of commitments made by government counterparts (e.g., the continued funding of human resources; lab maintenance), and confirm the absence of vector. This follow up is not included in the Congressional mandate for Zika, but would be useful to consider when planning future response efforts.

Recommendation 3a: The Bureau for Global Health should investigate and develop funding mechanisms that better address the key commodity needs of health emergencies, including rapid availability of medicines, diagnostics, immunizations, and health technologies.

Recommendation 3b: The Bureau for Global Health should work with the OAA and the office of the general counsel to establish systems for procurement emergencies that facilitate rapid and flexible procurement development.

Recommendation 3c: GH/ID should ensure that future health emergencies include stipulations for return observations following an emergency response, in order to assess the progress of recovery and/or preparedness for future emergencies.

Conclusion 4: Rapid health emergency response needs SOPs.

Zika response leadership and staffing was an issue that surfaced in response to several evaluation questions, especially under Evaluation Question 2; a specific discussion of staffing is also found under Evaluation Question 4 in the Findings section. Many respondents thought the Zika response should have had a full-time leader and that, in the future, GH/ID should develop a health emergency response team.

GH/ID has experienced infectious disease general service and foreign service officers and specialized technical advisors with good reputations within USAID-assisted countries, and in U.S. Government and international global health networks. These specialists are called upon to assist with critical health emergencies. For example, since the Zika response began, specialist teams have been called to help with two Ebola outbreaks and a plague outbreak. GH/ID's Zika response experience demonstrates it can manage a large, multi-country health response. More generally, GH/ID has fielded response teams overnight and are looked to as a platform for addressing limitations to rapid, effective responses and the transfer of capabilities to partner countries.

The office has the beginnings of legislative (emergency fund) and procurement (UNICEF facility for neonatal commodities) mechanisms that need work, but lacks a dedicated health emergency staff or SOPs for leading, staffing, launching, implementing, and evaluating emergency responses.

While respondents and the evaluation team support the idea of having a dedicated health emergency unit or team, USAID respondents felt a permanent unit/team was not tenable at this time. Nevertheless, GH/ID does have a mandate to address health emergencies and needs to prepare for health responses. This is likely to require broader Agency support, including high-level USAID and U.S. Government support when needed. As one example of this, in the Zika response, existing and former USAID personnel were identified and recruited into the response. Having a more permanent plan for identifying and tracking such personnel with technical, language, and context experience, and providing them with clear roles within a potential response, would improve the timeliness and effectiveness of future responses. Beyond staffing, response leadership, launch procedures, elements of implementation, and evaluation need to be codified. That process at present should focus on the development of SOPs.

Recommendation 4: GH/ID should develop emergency response SOPs covering leadership, staffing, launch, implementation, and evaluation for health emergencies.

VI. FLOW FROM FINDINGS TO CONCLUSION AND RECOMMENDATIONS

To answer the central purpose of this evaluation—“to inform the remainder of USAID’s Zika response, and advise the USAID Bureau for Global Health Office of Infectious Disease (GH/ID) on future work on health emergencies”—findings and themes from all five questions were considered, along with the actions that the Zika response was already taking to quantify, document, and plan for the sustainability of the strengthening activities. The four tables on the following pages demonstrate the progression from the findings to each of the four main conclusions and recommendations in a condensed version of what is found above in the main report text.

CONCLUSION I: USAID’s Zika response in the LAC region did “support and strengthen systems for priority countries in their Zika response effort in order to minimize negative pregnancy outcomes.”

<p>Findings:</p> <p>Q1</p> <ul style="list-style-type: none"> ▪ Took advantage of key enablers: networks for technical information exchange existed, including regional networks and alliances. ▪ Provided assistance to address: limitations to health systems, limited diagnostic and supply chain capacity, and gender norms. Addressed security issues and some government concerns about impact on tourism on a case-by-case basis. <p>Q2</p> <ul style="list-style-type: none"> ▪ USAID brought past regional and country expertise, including language skills, well-connected staff with networks, and Zika advisors or regional Zika coordinators to facilitate coordination among IPs and reduce duplication. (Country team meetings and the Zika Partners Communication Network website were key) Stayed flexible to remain locally relevant. (This eventually led to sustaining Zika response approaches within national programs.) ▪ Implemented with limitations that included not having designed response in concert with partner country leaders and not adequately engaging USAID missions. <p>Q3</p> <ul style="list-style-type: none"> ▪ Human capacity development under the response seen as key to meeting objectives (e.g., entomological surveillance training and QI coaches and teams). ▪ Behavior messaging matrix consolidated evidence-based approaches to Zika SBCC and provided guidance. <p>Q4</p> <ul style="list-style-type: none"> ▪ Reviewed design and implementation of Ebola to design Zika response, which led to centralized budgeting and management, inclusion of SBCC as a cross-cutting issue, health system strengthening on emergency assistance to better enable partner countries to handle the next emergency, research to understand behaviors, and streamlined M&E plan. ▪ Bureau for Global Health designated as point for health emergencies in USAID guidance that delineates when to call on this bureau. <p>Q5</p> <p>During the response, national governments and IPs took advantage of regional-level guidelines, making it easier for governments to accept protocols and approaches.</p>	<p>Conclusion I:</p> <p>USAID’s Zika response in the LAC region did “support and strengthen systems for priority countries in their Zika response effort in order to minimize negative pregnancy outcomes.”</p> <ul style="list-style-type: none"> ▪ Close-out and reporting underway in time to document results. ▪ For both clarity and legacy, Zika response leadership and their representative should formally report and hand-off to partner governments on a country-by-country basis, especially given real and perceived lack of initial engagement. ▪ USAID missions, including those in countries, should hear directly from GH/ID about the Zika response experience, especially as GH develops as the USAID point for health emergencies. 	<p>Recommendation Ia:</p> <p>The GH Zika team and IPs should finalize plans for completion, hand-off, and/or integration of Zika response capabilities for each partner country.</p> <p>Recommendation Ib:</p> <p>GH/ID should ensure that USAID conducts closeout dissemination and/or discussions for Zika response countries with partner governments and/or key stakeholders.</p> <p>Recommendation Ic:</p> <p>GH/ID should disseminate information on the Zika virus and the experience of the Zika response to USAID missions, including presentations and discussions that include GH/ID and Zika team members.</p>
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CONCLUSION 2: External and internal online communication networks served USAID, IPs, and other stakeholders well throughout the Zika response.

<p>Findings:</p> <p>Q1</p> <ul style="list-style-type: none"> ▪ Countries took advantage of key enablers: regional networks for technical information exchange existed. ▪ Limitations to health systems, security, and gender norms expected to remain challenges post-response. <p>Q2</p> <ul style="list-style-type: none"> ▪ Zika Partners Communication Network website (www.zikacommunicationnetwork.org) tracks reporting, reports on meetings, facilitates coordination among IPs, and reduces duplication. ▪ Remaining information needs: Several IPs working at community level need technical information (e.g., how to make an ovitrap). ▪ Integration of Zika into existing systems/programs seen as key to sustaining the capacity-strengthening achieved in the response; different communities require different approaches (e.g., volunteer sections, challenges when urban couples are at work). <p>Q3</p> <ul style="list-style-type: none"> ▪ 33,965 people trained in VC, including persons newly trained in entomological surveillance, entomology, and warehousing/inventory management for VC commodities. ▪ SBCC helped strengthen networks and share skills/approaches; behavior change matrix provided guidelines. ▪ Service delivery trained providers with patient-friendly skills to identify Zika, care for children and families; brought women together with their husbands to talk about using condoms during pregnancy. <p>Q4</p> <p>USAID incorporated useful elements of Ebola response: weekly bulletin model continually updated with data; K4H web page used for constant disease, programmatic, and research sharing among USAID and IPs, along with the public Zika Communication Network.</p> <p>Q5</p> <p>Prior to and during response, technical and programmatic information exchange was critical: much initial information came from WHO/PAHO or CDC.</p>	<p>Conclusion 2:</p> <p>K4H external and internal online communication networks served USAID, IPs, and other stakeholders well throughout the Zika response.</p> <ul style="list-style-type: none"> ▪ From Ebola experience, a web page to share and track all information and progress was picked up by the Zika response. ▪ While other partners (PAHO, UNICEF, CDC) will continue to inform countries about Zika-related issues, USAID’s work leaves wide range of Zika response training materials, guidelines, and research that is of use to country governments and stakeholders. ▪ Both the private and public web pages became integral to information-sharing during the response, and can be useful in informing future outbreaks. 	<p>Recommendation 2a:</p> <p>GH/ID should ensure continuation of the content of the public Zika Communication Network prior to the Zika response’s end, including quality control mechanisms for accurate and timely information.</p> <p>Recommendation 2b:</p> <p>The Zika response team should work with key government counterparts to provide Zika Communication Network materials, tools, and training examples for online use by host country systems. These alternatives should include quality control mechanisms to ensure accurate and timely information.</p>
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CONCLUSION 3: Procurement and budgeting requirements had a limiting effect on activities at various stages of the Zika response.

<p>Findings:</p> <p>Q1 Enablers and limitations for the response existed prior to USAID's entry, and many of both continue. In future responses, the strength of a country's health systems and supply chain, and security issues will impact GH/ID's participation and programming.</p> <p>Q2</p> <ul style="list-style-type: none"> ▪ USAID fielded staff and IPs with regional, country, language, and technical experience. ▪ USAID able to be flexible (e.g., avoiding duplication, integrating with local government needs). ▪ USAID provided significant financial resources. ▪ USAID pleased with the speed of the procurement (e.g., for PSCs); IPs experienced bottlenecks (e.g., approvals for raising funding ceilings and extensions took time). ▪ Commodity procurement for condoms faster than normal; both repellent and condom procurement too slow for response. <p>Q3 Procurement or budget impacted during implementation:</p> <ul style="list-style-type: none"> ▪ Different IP mixes by country required, but money could not be moved. ▪ Varied approaches needed regarding geographic/socioeconomic differences. ▪ Examples existed of new equipment and personnel requirements during implementation not being filled. <p>Q4</p> <ul style="list-style-type: none"> ▪ Learning from Ebola response, Zika response was centrally funded and managed; used central mechanisms. ▪ Zika predated emergency fund for rapid starts. ▪ Task force included technical and legislative affairs personnel. ▪ Despite not having a new direct hire lead, USAID team was staffed; rapid hiring and deployment of institutional contractors and PSCs for management at HQ and in field, respectively; did not secure an entomologist. ▪ Hold ups on extensions/contracts for key IPs; contractual workplan requirements were cumbersome. <p>Q5 System-strengthening to be maintained at national level with assistance and networking from regional organizations and alliances, and responsibilities for community and local government work.</p>	<p>Conclusion 3: Procurement and budgeting requirements had a limiting effect on activities at various stages of the Zika response.</p> <ul style="list-style-type: none"> ▪ In most situations, USAID-provided repellents and condoms did not coincide with field programmatic needs. ▪ Difficulties were in amending or extending USAID agreements and contracts, and a lack of flexibility in moving funds after obligations constrained the response. ▪ Obligation and use of funds were time limited, and could not be set aside for follow-up post response. 	<p>Recommendation 3a: The Bureau for Global Health should investigate and develop funding mechanisms that better address the key commodity needs of health emergencies, including rapid availability of medicines, diagnostics, immunizations, and health technologies.</p> <p>Recommendation 3b: The Bureau for Global Health should work with the OAA and the office of the general counsel to establish systems for procurement emergencies that facilitate rapid and flexible procurement and workplan development.</p> <p>Recommendation 3c: GH/ID should ensure that future health emergencies include stipulations for return observations following an emergency response, in order to assess the progress of recovery and/or preparedness for future emergencies.</p>
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CONCLUSION 4: Rapid emergency response needs SOPs.

<p>Findings:</p> <p>Q1 As with Zika, enablers and limitations for an emergency response already exist. For example, a GH/ID representative, such as an emergency pandemic treatment coordinator, or an IP may already be present, and/or existing in-country emergency response teams with U.S. Government support may exist.</p> <p>Q2</p> <ul style="list-style-type: none"> ▪ Rapid turnover and part-time response leadership; leadership did not conduct pre-funding assessments or engagement activities with partner governments prior to launch. ▪ Awkward and lengthy workplan process, including some overlap once the response was fielded. <p>Q3 Successful close-out and integration of the strengthening and support resulting from the response is expected, and the process has begun.</p> <p>Q4</p> <ul style="list-style-type: none"> ▪ Much learning from Ebola experience, especially on need to centralize management, and information sharing. ▪ USAID had several potential leaders for the response, some of whom spent time in the lead chair; the lack of a permanent, full-time response lead was difficult for HQ and the field. ▪ Initial task force unwieldy; procurement personnel brought in after plan. ▪ Suggested by respondents: <ul style="list-style-type: none"> ○ rapid deployment unit in GH/ID. ○ standardize operating procedures for health emergencies, including commodities, M&E, and core research needs. ○ train new staff in USAID roles (e.g., interacting with IPs and governments, AOR/COR roles, interagency). <p>Q5 National-level engagement and decisions by the national level was the most important for meeting objectives and for sustaining USAID’s investment within the health system in LAC.</p>	<p>Conclusion 4: Rapid emergency response needs SOPs.</p> <ul style="list-style-type: none"> ▪ The Bureau for Global Health is tasked in USAID guidance as the focal point for health emergencies. ▪ Since the Zika response began, GH/ID addressed two Ebola outbreaks in the DRC, and plague in Madagascar. ▪ Many health emergencies require high-level USAID and U.S. Government coordination and support, and the ability to bring a team together overnight. ▪ A dedicated unit or responsible team is needed that has a clear mandate to focus on preparation for health responses; USAID respondents report this is not tenable at this time. ▪ GH/ID should develop SOPs that delineate/codify key elements of a health emergency response: leadership, staffing, launch, implementation, and evaluation. ▪ GH/ID could provide a platform for addressing limitations to rapid, effective responses and the transfer of capabilities to partner countries, and could continue identifying and testing ways to access the strengths of USAID when addressing health emergencies. 	<p>Recommendation 4: GH/ID should develop emergency response SOPs covering leadership, staffing, launch, implementation, and evaluation for health emergencies.</p>
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ANNEX I. EVALUATION STATEMENT OF WORK

Assignment #: 552 [assigned by GH Pro]

Global Health Program Cycle Improvement Project (GH Pro)

Contract No. AID-OAA-C-14-00067

EVALUATION OR ANALYTIC ACTIVITY STATEMENT OF WORK (SOW)

Date of Submission: 3/08/2018

Last update: 11-19-18

I. **TITLE:** Performance Evaluation of USAID's Zika Response in LAC

II. **Requester / Client**

USAID/Washington

Office/Division: GH / ID / Zika

III. **Funding Account Source(s): (Click on box(es) to indicate source of payment for this assignment)**

3.1.1 HIV

3.1.4 PIOET

3.1.7 FP/RH

3.1.2 TB

3.1.5 Other public health threats

3.1.8 WSSH

3.1.3 Malaria

3.1.6 MCH

3.1.9 Nutrition

3.2.0 Other (specify): Zika

IV. **Cost Estimate: Note: GH Pro will provide a cost estimate based on this SOW**

V. **Performance Period**

Expected Start Date (on or about): May 23, 2018

Anticipated End Date (on or about): April 30, 2019

VI. **Location(s) of Assignment: (Indicate where work will be performed)**

Washington, DC with four site visits in LAC (one in Central America, two in Caribbean, two in South America)

Type of Analytic Activity (Check the box to indicate the type of analytic activity)

EVALUATION:

Performance Evaluation (Check timing of data collection)

Midterm

Endline

Other (specify): .

Performance evaluations encompass a broad range of evaluation methods. They often incorporate before–after comparisons but generally lack a rigorously defined counterfactual. Performance evaluations may address descriptive, normative, and/or cause-and-effect questions. They may focus on what a particular project or program has achieved (at any point during or after implementation); how it was implemented; how it was perceived and valued; and other questions that are pertinent to design, management, and operational decision making

- Impact Evaluation** (Check timing(s) of data collection)
- Baseline Midterm Endline Other (specify):

Impact evaluations measure the change in a development outcome that is attributable to a defined intervention. They are based on models of cause and effect and require a credible and rigorously defined counterfactual to control for factors other than the intervention that might account for the observed change. Impact evaluations in which comparisons are made between beneficiaries that are randomly assigned to either a treatment or a control group provide the strongest evidence of a relationship between the intervention under study and the outcome measured.

OTHER ANALYTIC ACTIVITIES

- Assessment**
Assessments are designed to examine country and/or sector context to inform project design, or as an informal review of projects.

- Costing and/or Economic Analysis**
Costing and Economic Analysis can identify, measure, value and cost an intervention or program. It can be an assessment or evaluation, with or without a comparative intervention/program.

- Other Analytic Activity (Specify)**
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PEPFAR EVALUATIONS (PEPFAR Evaluation Standards of Practice 2014)

Note: If PEPFA-funded, check the box for type of evaluation

- Process Evaluation** (Check timing of data collection)
- Midterm Endline Other (specify): _____

Process Evaluation focuses on program or intervention implementation, including, but not limited to access to services, whether services reach the intended population, how services are delivered, client satisfaction and perceptions about needs and services, management practices. In addition, a process evaluation might provide an understanding of cultural, socio-political, legal, and economic context that affect implementation of the program or intervention. For example: Are activities delivered as intended, and are the right participants being reached? (PEPFAR Evaluation Standards of Practice 2014)

- Outcome Evaluation**
Outcome Evaluation determines if and by how much, intervention activities or services achieved their intended outcomes. It focuses on outputs and outcomes (including unintended effects) to judge program effectiveness, but may also assess program process to understand how outcomes are produced. It is possible to use statistical techniques in some instances when control or comparison groups are not available (e.g., for the evaluation of a national program). Example of question asked: To what extent are desired changes occurring due to the program, and who is benefiting? (PEPFAR Evaluation Standards of Practice 2014)

- Impact Evaluation** (Check timing(s) of data collection)
- Baseline Midterm Endline Other (specify): .

Impact evaluations measure the change in an outcome that is attributable to a defined intervention by comparing actual impact to what would have happened in the absence of the intervention (the counterfactual scenario). IEs are based on models of cause and effect and require a rigorously defined counterfactual to control for factors other than the intervention that might account for the observed change. There are a range of accepted approaches to applying a counterfactual analysis, though IEs in which comparisons are made between beneficiaries that are randomly assigned to either an intervention or a control group provide the strongest evidence of a relationship between the intervention under study and the outcome measured to demonstrate impact.

- Economic Evaluation (PEPFAR)**

Economic Evaluations identifies, measures, values and compares the costs and outcomes of alternative interventions. Economic evaluation is a systematic and transparent framework for assessing efficiency focusing on the economic costs and outcomes of alternative programs or interventions. This framework is based on a comparative analysis of both the costs (resources consumed) and outcomes (health, clinical, economic) of programs or interventions. Main types of economic evaluation are cost-minimization analysis (CMA), cost-effectiveness analysis (CEA), cost-benefit analysis (CBA) and cost-utility analysis (CUA). Example of question asked: What is the cost-effectiveness of this intervention in improving patient outcomes as compared to other treatment models?

VII. BACKGROUND

If an evaluation, Project/Program being evaluated:

USAID Zika Program awards/contracts were funded from April 2016 to September 2019. Annex I is a complete list of the projects funded under the Zika Program.

Background of project/program/intervention:

In February 2016, the World Health Organization declared outbreaks of Zika a Public Health Emergency of International Concern due to their connection to devastating fetal neurological outcomes. Since then, the virus has spread to 48 countries and territories in the Americas,⁴⁵ including the United States. This quick spread of a previously neglected tropical disease mobilized the US Government to respond, primarily with reprogrammed Ebola funds and later with emergency supplemental funds.

On April 8, 2016, USAID submitted a Congressional Notification advising that the Agency, with the Department of State, intended to obligate \$295M of FY15 ESF funds in the health program area to support Zika and Ebola. \$158M of those funds went to the Centers of Disease Control and Prevention (CDC) through an interagency transfer, including \$78M for Zika and \$80M for continued Ebola efforts. An additional \$4M went to the International Atomic Energy Agency, leaving USAID with \$133M to directly program. Of these funds, \$10M were established for an advance purchase commitment and \$30M were dedicated for Grand Challenge innovations, both of which are managed by the Global Health Bureau's Center for Accelerating Innovation and Impact. This evaluation will focus on funding within the USAID/GH/ID's lines of effort, incorporating learning from investments with the CDC and the CAII when they are relevant to ID-managed interventions (excluding, for example, stand-alone pilot projects that are not scaled up or whose findings are not incorporated into USAID's efforts).

USAID learned significant lessons from the recent Ebola response in three West African countries, wherein there were multiple teams existing in different spaces, including the Africa Bureau, the Bureau for Global Health, and Bureau for Democracy, Conflict and Humanitarian Assistance. Consequently, Zika team membership consists of employees in the Bureau for Latin America and the Caribbean and the Bureau for Global Health in Washington and in strategically placed missions at subregional and country levels. All funds sit exclusively within GH, and thus management decisions are under the authority of GH. Programs were designed as regional or global projects to allow for flexibility in responding to epidemiological changes and to needs identified in the region.

At the time of the Zika outbreak, USAID had graduated its bilateral health programming (with the exception of PEPFAR activities) in all but two countries (Guatemala and Haiti). As such, the region's health systems boast a higher capacity than other regions where USAID works, and general outcomes in areas like family planning and maternal and child health are higher than other countries receiving

⁴⁵ http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&Itemid=270&gid=40945&lang=en

development assistance. However, the emergence of Zika meant that countries that had recently transitioned out of assistance were faced with unforeseen challenges in entomology and maternal and child care. Given this context, USAID partnered with well-recognized international organizations like the Pan American Health Organization (PAHO), UNICEF, and the International Federation of the Red Cross and Red Crescent Societies, which have ongoing relationships with host country governments. To fill Zika-specific gaps like training health care providers and performing direct larviciding activities, USAID programmed Zika funds into global mechanisms that were able to quickly mobilize to work on Zika in LAC. Lastly, at the community level, USAID's GH Bureau put out a call for Integrating Community Health Annual Program Statement partners, awarding six cooperative agreements to work at the subnational level across the region. All of this was supplemented by \$30 million toward a Grand Challenge to develop innovations aimed at eliminating Zika and future threats similar to it.

USAID designed a dynamic regional response to the Zika virus, coordinated among the United States Government (USG) interagency and multilateral partners. In this effort, USAID took the lead on three lines of effort under the Spend Plan in its Congressional Notification: vector control, social and behavior change communication (SBCC), and service delivery in maternal and child health and family planning, with research and community engagement as critical cross-cutting areas. Geographically, USAID focused primarily on countries with a cross-section of high anticipated burden of disease and limited capacity to respond to the outbreaks, taking into account existing bilateral relationships. As a result, the Agency operationalized its full suite of programming in five primary countries initially then expanded to reach additional countries based on their needs in individual lines of effort. The first five countries to fully implement were Guatemala, Honduras, El Salvador, Haiti, and the Dominican Republic in April-October 2016. Shortly after, moderate programming went to Nicaragua, Jamaica, Paraguay, and Peru. In Ecuador, the Eastern and Southern Caribbean, and Colombia, limited programming was tailored to the country context and interests of the governments.

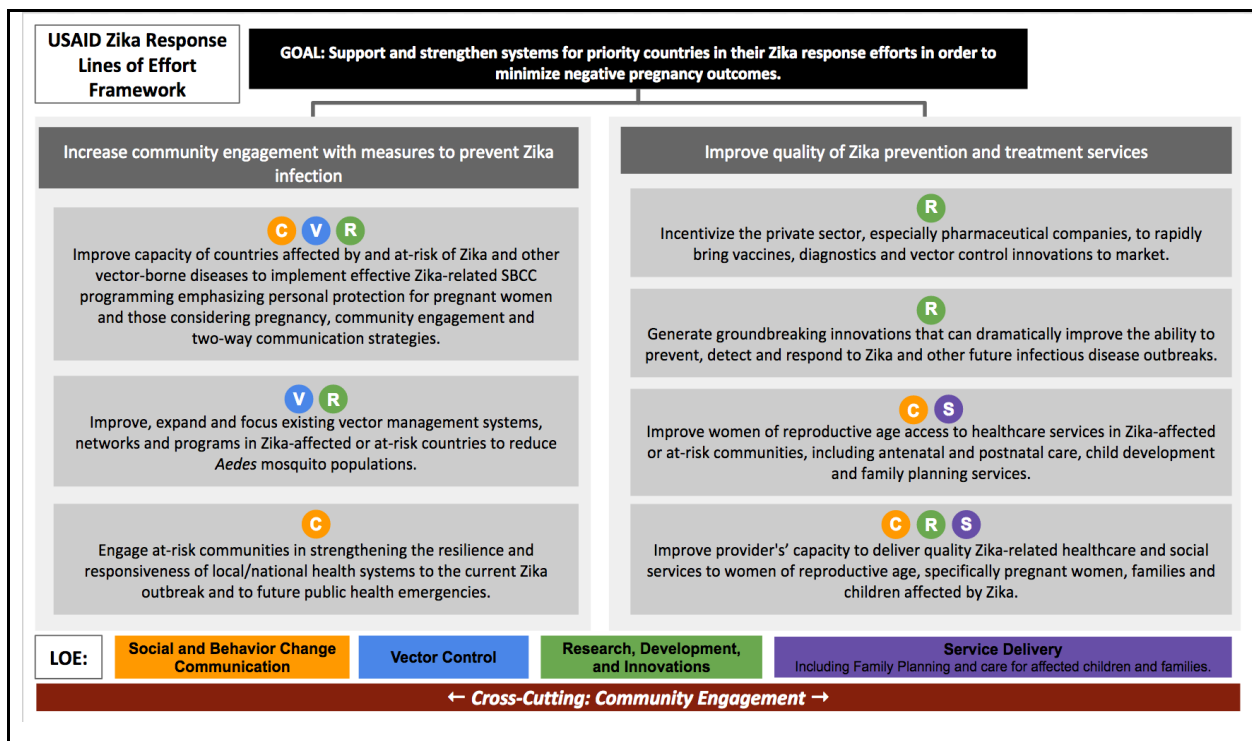
While USAID has responded to emergency outbreaks in the past, like avian influenza and Ebola, the Zika virus was the first major vector-borne disease to break out in a region that had closed out bilateral health programming in most missions (all but two), and it was the first to have components of mosquito and sexual transmission as well as serious neurological outcomes for infected fetuses. Zika outbreaks gained wide public international attention when it was anecdotally linked to thousands of cases of infant microcephaly in Northeast Brazil just before the summer Olympics in Rio de Janeiro. This link was later confirmed and renamed congenital Zika syndrome to account for the wide range of fetal impacts beyond microcephaly, some of which experts were still discovering two years after the outbreak. While reported cases were high in Brazil and then Colombia early in the outbreak, cases of congenital Zika syndrome were not high in other countries where the virus spread, in part due to poor diagnostic and reporting systems. USAID's programs worked in places with oftentimes low laboratory capacity to diagnose Zika, mobilizing communities to protect their pregnant women and to encourage them to seek care in facilities, which, in turn, were capacitated to incorporate Zika information into services.

Although the region had seen recent outbreaks of dengue fever and chikungunya virus, both transmitted by the same mosquito as Zika, previous USAID health programs in the region had not focused primarily on this vector. Part of the Agency’s response was direct implementation of vector control activities to mitigate the damage of the mosquitoes and capacitating the region to continue monitoring and elimination of the *Aedes aegypti*.

The portfolio is run out of the Bureau for Global Health (GH), which is solely responsible for implementing the projects, with support from the Bureau for Latin America and the Caribbean (LAC), Legislative and Public Affairs (LPA), the Center for Accelerating Innovation and Impact, and others across the Agency. With the exception of Haiti, where funds were obligated into existing health projects in MCH and SBCC, all projects were managed out of Washington and implemented in a multi-country approach. As the operating unit (OU), GH is responsible for monitoring, reporting, and evaluating activities. GH receives administrative and logistical support from Missions across LAC.

Strategic or Results Framework for the project/program/intervention (*paste framework below*)

If project/program does not have a Strategic/Results Framework, describe the theory of change of the project/program/intervention.



What is the geographic coverage and/or the target groups for the project or program that is the subject of analysis?

This project should include at least 1 evaluation of each:

- Full, Phase I programming countries:
 - Honduras
 - Guatemala
 - El Salvador
 - Dominican Republic
 - Haiti (not to be included due to early end date)
- Phase II: Moderate or Limited Programming Countries:
 - Nicaragua
 - Jamaica
 - Eastern and Southern Caribbean (e.g. Trinidad, Barbados, Guyana, St. Lucia, others TBD)
 - Peru
 - Ecuador
 - Paraguay
 - Colombia

Each subregion should be represented in this evaluation: Central America (including the DR), South America, and the Eastern and Southern Caribbean.

VIII. SCOPE OF WORK

- A. **Purpose:** Why is this evaluation or analysis being conducted (purpose of analytic activity)? Provide the specific reason for this activity, linking it to future decisions to be made by USAID leadership, partner governments, and/or other key stakeholders.

1. To inform transition out of Zika assistance, including guidance/recommendations for implementing partners in the remainder of Year 3 of programming around where to focus and what to recommend to partner government counterparts for future management of Zika.
2. To inform the GH/ID office leadership about future infectious disease outbreak programming.

- B. **Audience:** Who is the intended audience for this analysis? Who will use the results? If listing multiple audiences, indicate which are most important.

The most important audience is the Front Office of the Office of Infectious Diseases. The secondary audience is the USAID Zika team and implementing partners who might need to consider implementation of any programmatic course corrections.

- C. **Applications and use:** How will the findings be used? What future decisions will be made based on these findings?

Part I of this evaluation will inform any tweaks to the program that need to be made in the remainder of Year 3, as well as recommendations for best practices, products, and tools that USAID will leave with partner organizations in the region and with its partner governments, which by and large will not continue receiving any health assistance from USAID (aside from bilateral programming in Haiti and Guatemala, as well as some PEPFAR funding in the region). **Part 2** of this evaluation will become part of a larger learning exercise wherein USAID will use the results of this evaluation, as well as evaluations from Ebola, Avian Influenza, and other relevant ID programming to develop an internal strategy for mounting infectious disease outbreak responses.

D. Evaluation/Analytic Questions & Matrix:

- a) Questions should be: a) aligned with the evaluation/analytic purpose and the expected use of findings; b) clearly defined to produce needed evidence and results; and c) answerable given the time and budget constraints. Include any disaggregation (e.g., sex, geographic locale, age, etc.), they must be incorporated into the evaluation/analytic questions. **USAID policy suggests 3 to 5 evaluation/analytic questions.**
- b) List the recommended methods that will be used to collect data to be used to answer each question.
- c) State the application or use of the data elements toward answering the evaluation questions; for example, i) ratings of quality of services, ii) magnitude of a problem, iii) number of events/occurrences, iv) gender differentiation, v) etc.

	Evaluation Question	Suggested methods for answering this question <i>What data sources, collection & analysis methods</i>	Sampling Frame <i>Who is the best source for this information? What is the sampling criteria?</i>
1	<p>What aspects of the Zika program are on track to meet objectives outlined in the results framework and Congressional Spend Plans, and what program aspects are not likely to meet objectives by the end of the program period?</p>	<p>Review of M&E framework, partner PMPs</p>	<p>USAID will provide implementing partner data, which should be reviewed by each line of effort (service delivery, SBCC, vector control, community engagement, and research/innovation)</p>
2	<p>What contributions has USAID made to coordinating Zika response plans and activities in LAC to prevent duplication of efforts and share lessons learned among external donors, partner governments, and implementing partner organizations, a) within countries, and b) between countries in each subregion?</p> <p><i>Areas for consideration include:</i></p> <ul style="list-style-type: none"> a. Coordination efforts and ways to improve them in future USAID responses to infectious disease, and, to the degree possible, in Year III of the USAID Zika response b. Stakeholder coordination around arboviruses and around congenital Zika syndrome, now and after USAID's Zika programming ends 	<p>Key informant interviews; review of narrative monthly reports, regional meeting reports, and workplans</p>	<p>USAID Zika advisors and line of effort leads, Ministry of Health counterparts</p>

	Evaluation Question	Suggested methods for answering this question <i>What data sources, collection & analysis methods</i>	Sampling Frame <i>Who is the best source for this information? What is the sampling criteria?</i>
3	What contributions has USAID made to support and strengthen the LAC region's capacity to a) respond to the emergence of Zika virus and associated negative birth outcomes in the Americas and b) manage Zika and its effects in the future?	KIs, review of capacity building indicators, potentially a survey	Sampling criteria TBD but should include all levels of the health system and all countries surveyed
4	What lessons about implementing a medium-term outbreak response can USAID learn from the Zika response, and what set of criteria should USAID consider in making programmatic decisions during an emergency response?	Key informant interviews, potentially a focus group	Key USAID personnel involved in programmatic design/ decisions from development of original Congressional request to present
5	How did the structure of the programs (community, national, and regional implementing partners) contribute to meeting the Agency's goals, and what are recommendations for organizing short-term responses that fall outside of the scope of standard program design cycles?	Key informant interviews, potentially in-country focus groups	Sample should include representation from all three levels in at least two lines of effort. For example: if vector control, then MCDI at community level, ZAP at national level, and PAHO at regional.

Other Questions [OPTIONAL]

(Note: Use this space only if necessary. Too many questions leads to an ineffective evaluation or analysis.)

E. **Methods:** Check and describe the recommended methods for this analytic activity. Selection of methods should be aligned with the evaluation/analytic questions and fit within the time and resources allotted for this analytic activity. Also, include the sample or sampling frame in the description of each method selected.

General Comments related to Methods:

There are two parts to this evaluation. Both parts will be integrated into one report:

- 1) Results, achievements, best practices and lessons learned, leading to recommendations for transition of the Zika Program and for future similar programs.

- 2) Program, organizational, and management structures. USAID will take these findings, collate them with findings from Ebola and other ID evaluations to develop an internal strategy/approach for mounting future ID responses.

■ **Document and Data Review** (*list of documents and data recommended for review*)

This desk review will be used to provide background information on the project/program, and will also provide data for analysis for this evaluation. Documents and data to be reviewed include:

- IP SOWs, implementing frameworks
- IP workplans
- IP PMPs, and routine indicator/data reports
- IP quarterly and annual reports
- Regional meeting reports
- Zika Operational Plans
- Other Zika Program Congressional documents

■ **Secondary analysis of existing data** (*This is a re-analysis of existing data, beyond a review of data reports. List the data source and recommended analyses*)

Data Source (<i>existing dataset</i>)	Description of data	Recommended analysis
Zika M&E framework reporting	Partners submit quarterly reports that are aggregated by indicator and country	Examination of capacity building measures; comparison of results by level of implementation
Landscaping reports (KAP surveys, needs assessments, baseline reports)	Summative reports on formative and preliminary research outlining the finding and analysis, generally by country. Where possible, raw data will be provided	Examination of program context at onset of assistance for comparison with PMP data and for development of data collection tools to compare during site visits

■ **Key Informant Interviews** (*list categories of key informants, and purpose of inquiry*)

See above, disaggregated by question, including:

- Key USAID stakeholders involved from the beginning: Irene Koek, Jennifer Slotnick, Kelly Saldana, OFDA counterpart
- USAID Zika Advisors in DC and the field
- USAID/GH/ID leadership
- USAID COR/AORs of Zika buy-ins and awards
- MOH counterparts
- IP representatives engaged in Zika programming, especially in vector control, community engagement, and SBCC
- USAID CAII advisors on the Grand Challenge for Zika and future threats
- Key beneficiaries, if gaps exist in the literature and data review. These might include UNICEF care and support group members, community leaders, or others

■ Group Interviews *(list categories of groups, and purpose of inquiry)*

Key informants may be interviewed in small groups of similar respondents, as long as all participants feel free to express their own opinions.

Focus Group Discussions *(list categories of groups, and purpose of inquiry)*

Client/Participant Satisfaction or Exit Interviews *(list who is to be interviewed, and purpose of inquiry)*

■ Survey *(describe content of the survey and target responders, and purpose of inquiry)*

A web-based survey, in English and Spanish, will be conducted among stakeholders (e.g. USAID staff, IPs, partner governments, etc.) to obtain information and opinions for a broader range of respondents than can be reached by interviews alone.

■ Case Study *(describe the case, and issue of interest to be explored)*

Three countries should be used as individual case study of what it looks like to mount a) a full response in a country from beginning to end; b) a comprehensive but delayed response; and c) a tailored response. They should be compared to inform findings in the report. Most likely this will include countries with both full and moderate Zika programming, with one country from each region: Central America, South America and the Caribbean. Country selection will be determined in consultation with the USAID Zika team.

■ Other *(list and describe other methods recommended for this evaluation/analytic, and purpose of inquiry)*

additional methodologies as identified by the evaluation team

If impact evaluation –

Is technical assistance needed to develop full protocol and/or IRB submission?

Yes No

List or describe case and counterfactual”

Case	Counterfactual

IX. HUMAN SUBJECT PROTECTION

The Analytic Team must develop protocols to insure privacy and confidentiality prior to any data collection. Primary data collection must include a consent process that contains the purpose of the evaluation, the risk and benefits to the respondents and community, the right to refuse to answer any question, and the right to refuse participation in the evaluation at any time without consequences. Only adults can consent as part of this evaluation. Minors cannot be respondents to any interview or survey, and cannot participate in a focus group discussion without going through an IRB. The only time minors can be observed as part of this evaluation is as part of a large community-wide public event, when they are part of family and community in the public setting. During the process of this evaluation, if data are abstracted from existing documents that include unique identifiers, data can only be abstracted without this identifying information.

An Informed Consent statement included in all data collection interactions must contain:

- Introduction of facilitator/note-taker
- Purpose of the evaluation/assessment
- Purpose of interview/discussion/survey
- Statement that all information provided is confidential and information provided will not be connected to the individual
- Right to refuse to answer questions or participate in interview/discussion/survey
- Request consent prior to initiating data collection (i.e., interview/discussion/survey)

X. ANALYTIC PLAN

Describe how the quantitative and qualitative data will be analyzed. Include method or type of analyses, statistical tests, and what data it to be triangulated (if appropriate). For example, a thematic analysis of qualitative interview data, or a descriptive analysis of quantitative survey data.

All analyses will be geared to answer the evaluation questions. Additionally, the evaluation will review both qualitative and quantitative data related to the project/program's achievements against its objectives and/or targets.

Quantitative data will be analyzed primarily using descriptive statistics. Data will be stratified by demographic characteristics, such as sex, age, and location, whenever feasible. Other statistical test of association (i.e., odds ratio) and correlations will be run as appropriate.

Thematic review of qualitative data will be performed, connecting the data to the evaluation questions, seeking relationships, context, interpretation, nuances and homogeneity and outliers to better explain what is happening and the perception of those involved. Qualitative data will be used to substantiate quantitative findings, provide more insights than quantitative data can provide, and answer questions where other data do not exist.

Use of multiple methods that are quantitative and qualitative, as well as existing data (e.g., project/program performance indicator data, and any survey or research data available related Zika, etc.) will allow the Team to triangulate findings to produce more robust evaluation results.

The Evaluation Report will describe analytic methods and statistical tests employed in this evaluation.

XI. ACTIVITIES

List the expected activities, such as Team Planning Meeting (TPM), briefings, verification workshop with IPs and stakeholders, etc. Activities and Deliverables may overlap. Give as much detail as possible.

Background reading – Several documents are available for review for this analytic activity. These include scopes of work, annual work plans, M&E plans, monthly narrative reports, quarterly progress reports, and routine reports of project performance indicator data, as well as PAHO, and when available, Ministry of Health surveillance data. This desk review will provide background information for the Evaluation Team, and will also be used as data input and evidence for the evaluation.

Team Planning Meeting (TPM) – A four-day team planning meeting (TPM) will be held at the initiation of this assignment and before the data collection begins. The TPM will:

- Review and clarify any questions on the evaluation SOW
- Clarify team members' roles and responsibilities
- Establish a team atmosphere, share individual working styles, and agree on procedures for resolving differences of opinion
- Review and finalize evaluation questions
- Review and finalize the assignment timeline
- Develop data collection methods, instruments, tools and guidelines
- Review and clarify any logistical and administrative procedures for the assignment
- Develop a data collection plan
- Draft the evaluation work plan for USAID's approval
- Develop a preliminary draft outline of the team's report
- Assign drafting/writing responsibilities for the final report

Briefing and Debriefing Meetings – Throughout the evaluation the Team Lead will provide briefings to USAID. The In-Brief and Debrief are likely to include the all Evaluation Team experts, but will be determined in consultation with the Mission. These briefings are:

- **Evaluation launch**, a call/meeting among the USAID, GH Pro and the Team Lead to initiate the evaluation activity and review expectations. USAID will review the purpose, expectations, and agenda of the assignment. GH Pro will introduce the Team Lead, and review the initial schedule and review other management issues.
- **In-brief with USAID**, as part of the TPM. At the beginning of the TPM, the Evaluation Team will meet with USAID to discuss expectations, review evaluation questions, and intended plans. The Team will also raise questions that they may have about the project/program and SOW resulting from their background document review. The time and place for this in-brief will be determined between the Team Lead and USAID prior to the TPM.
- **Workplan and methodology review briefing**. At the end of the TPM, the Evaluation Team will meet with USAID to present an outline of the methods/protocols, timeline and data collection tools. Also, the format and content of the Evaluation report(s) will be discussed.
- **In-brief with project** to review the evaluation plans and timeline, and for the project to give an overview of the project to the Evaluation Team.
- The Team Lead (TL) will brief USAID **weekly** to discuss progress on the evaluation. As preliminary findings arise, the TL will share these during the routine briefing, and in an email.
- A **final debrief** between the Evaluation Team and USAID will be held at the end of the evaluation to present preliminary findings to USAID. During this meeting a summary of the data will be presented, along with high level findings and draft recommendations. For the debrief, the Evaluation Team will prepare a **PowerPoint Presentation** of the key findings,

issues, and recommendations. The evaluation team shall incorporate comments received from USAID during the debrief in the evaluation report. (**Note:** *preliminary findings are not final and as more data sources are developed and analyzed these finding may change.*)

- **Stakeholders’ debrief** will be held with the project staff and other stakeholders identified by USAID. This will occur following the final debrief with the team, and will not include any information that may be procurement deemed sensitive or not suitable by USAID. Ideally, this will coincide with a regular Zika partners meeting in Washington DC with HQ implementing partner staff and be followed up with a brief summary of findings either in written form or through teleconference presentations disseminated to relevant in-country partner staff at country partners meetings.

Fieldwork, Site Visits and Data Collection – The evaluation team will conduct site visits to for data collection. Selection of sites to be visited will be finalized during TPM in consultation with USAID. The evaluation team will outline and schedule key meetings and site visits prior to departing to the field.

Evaluation/Analytic Report – The Evaluation/Analytic Team under the leadership of the Team Lead will develop a report with findings and recommendations (see Analytic Report below). Report writing and submission will include the following steps:

1. Team Lead will submit draft evaluation report to GH Pro for review and formatting
2. GH Pro will submit the draft report to USAID
3. USAID will review the draft report in a timely manner, and send their comments and edits back to GH Pro
4. GH Pro will share USAID’s comments and edits with the Team Lead, who will then do final edits, as needed, and resubmit to GH Pro
5. GH Pro will review and reformat the final Evaluation/Analytic Report, as needed, and resubmit to USAID for approval.
6. Once Evaluation Report is approved, GH Pro will reformat it for 508 compliance and post it to the DEC.

The Evaluation Report **excludes** any **procurement-sensitive** and other sensitive but unclassified (**SBU**) information. This information will be submitted in a memo to USAID separate from the Evaluation Report.

Data Submission – All quantitative data will be submitted to GH Pro in a machine-readable format (CSV or XML). The datasets created as part of this evaluation must be accompanied by a data dictionary that includes a codebook and any other information needed for others to use these data. It is essential that the datasets are stripped of all identifying information, as the data will be public once posted on USAID Development Data Library (DDL).

Where feasible, qualitative data that do not contain identifying information should also be submitted to GH Pro.

XII. DELIVERABLES AND PRODUCTS

Select all deliverables and products required on this analytic activity. For those not listed, add rows as needed or enter them under “Other” in the table below. Provide timelines and deliverable deadlines for each.

Deliverable / Product	Timelines & Deadlines (estimated)
■ Launch briefing	May 2018
■ In-brief with USAID	May 2018

Deliverable / Product	Timelines & Deadlines (estimated)
■ Workplan and methodology review briefing	May 2018
■ Workplan (must include questions, methods, timeline, data analysis plan, and instruments)	May 2018
■ In-brief with target project / program	
■ Routine briefings	Weekly
■ Out-brief with USAID with Power Point presentation	
■ IP & stakeholders findings review workshop with Power Point presentation	October 2018
■ Draft report	Submit to GH Pro: December 2018 GH Pro submits to USAID: January 2019
■ Final report	Submit to GH Pro: February 2019 GH Pro submits to USAID: March 2019
■ Raw data (cleaned datasets in CSV or XML with codesheet)	February 2019
■ Report Posted to the DEC	April 2019
<input type="checkbox"/> Other (specify):	

Estimated USAID review time

Average number of business days USAID will need to review the Report? 10 Business days

XIII. TEAM COMPOSITION, SKILLS AND LEVEL OF EFFORT (LOE)

The evaluation team should be comprised of three expert evaluators, supported by one POC on USAID/Washington's Zika team. The external team should include:

- 1 team leader
- 1 evaluation specialist
- 1 organizational development expert
- 1 infectious disease advisor
- Rapid response advisor (part time, as needed)
- Logistical consultants or a part-time program assistant

Team Lead: The evaluation team leader will lead the project in all aspects, including the writing, and direct the team. He or she must be fluent in Spanish. This person shall possess at least 7 years of experience in global health and/or emergency response projects. This person will be responsible for ensuring that all deliverables are well-written, clear, and coherent. He or she should be well-versed in reading highly technical content, related to Zika/infectious diseases, maternal and child health or vector management, FP/RH, or SBCC.

The **Evaluation Specialist** shall have expertise in maternal and child health, social and behavior change communication, or vector control. This person shall be fluent in Spanish and have at least 2 years of experience working in LAC or with projects implemented in LAC. This person will also lead development of data collection and analysis tools, through close consultation with the rest of the team. This person will lead discussions on the evaluation design and implementation, providing technical direction into defining the objectives and process.

The **Organizational Development Expert** will focus on the organizational and managerial aspects of the response. S/He or she will be responsible for developing recommendations around the organization

of future infectious disease outbreak responses. The successful candidate for this role should be well equipped to work independently and to develop interview questions and qualitative research tools autonomously. S/He should be fluent in Spanish. He or she should have an advanced degree in organizational psychology, HR, or a related field.

The **Infectious Disease Advisor** will serve as a subject matter expert for the evaluation and will provide technical expertise in the area of infectious disease prevention, detection and response. S/He will be responsible for providing technical input on all aspects of the Zika response, including vector control, SBCC, maternal and child health and community mobilization. S/He should have previous experience with complex infectious disease response programs requiring bilateral and cross-sectoral collaboration. S/He should be fluent in Spanish.

Other Staff Titles with Roles & Responsibilities (include number of individuals needed):

Logistics coordinators, one from each country visited, to support the Evaluation Team with all logistics and administration to allow them to carry out this evaluation. The Logistics Coordinator will have a good command of English and local language(s). S/He will have knowledge of key actors in the health sector and their locations including MOH, donors and other stakeholders. To support the Team, s/he will be able to efficiently liaise with hotel staff, arrange in-country transportation (ground and air), arrange meeting and workspace as needed, and insure business center support, e.g. copying, internet, and printing. S/he will work under the guidance of the Team Lead and the GH Pro Program Manager to make preparations, arrange meetings and appointments. S/he will conduct programmatic administrative and support tasks as assigned and ensure the processes moves forward smoothly. S/He may to assist with data collected, as needed.

A **GH Pro Program Assistant** will be assigned to this evaluation, to assist the Team with needed administrative and logistical support in DC and internationally.

As needed, GH Pro will provide an **Rapid Response Advisor** to provide input during the planning and data interpretation stages. S/He or she will be responsible for input on data collection tool development and recommendations around issues related to the need and execution of needed rapid response to disease outbreak. She will report to the Team Lead.

If all team members are not fluent in Spanish, **translators** will be hired in each country visited, as needed.

The **Technical Writer/Editor** will assist with writing and editing of the report drafts, as well as the final report. This will include providing guidance on structure, language and layout of the report.

Will USAID participate as an active team member or designate other key stakeholders to as an active team member? This will require full time commitment during the evaluation or analytic activity.

Yes – If yes, specify who:

Significant Involvement anticipated – If yes, specify who: Julie Gerdes

No

Staffing Level of Effort (LOE) Matrix:

This optional LOE Matrix will help you estimate the LOE needed to implement this analytic activity. If you are unsure, GH Pro can assist you to complete this table.

- For each column, replace the label "Position Title" with the actual position title of staff needed for this analytic activity.
- Immediately below each staff title enter the anticipated number of people for each titled position.
- Enter Row labels for each activity, task and deliverable needed to implement this analytic activity.
- Then enter the LOE (estimated number of days) for each activity/task/deliverable corresponding to each titled position.
- At the bottom of the table total the LOE days for each consultant title in the 'Sub-Total' cell, then multiply the subtotals in each column by the number of individuals that will hold this title.

Level of Effort in **days** for each Evaluation/Analytic Team member

(See *Illustrative LOE Chart on USAID/GH Pro webpage.*)

Activity / Deliverable		Evaluation/Analytic Team						
		Team Lead	Eval Spec	Inf Disease Adv	Logistics / Admin Coord	Rapid Response Adv	GH Pro Prog Asst	Technical Writer/Editor
Number of persons →		1	1	1	4 (1 per country)	1	1	
1	Launch call Briefing	0.5						
2	Desk review	10	10	10		5		
	Travel to/from DC	2	2	2				
	In-brief with USAID/Zika team	0.5	0.5	0.5		0.5	0.5	
3	Methodology, tool development, and evaluation design (Team Planning Meeting)	6	5	5		5	5	
4	Briefing on desk review findings, site visit plans with USAID with PowerPoint presentation (includes prep)	1	1	1		1	0.5	
5	Prep / Logistics for Site Visits				3		3	
6	Data collection / Site Visits (including travel to sites)	44	27	27	7	15		
7	Analysis of findings	5	5	5	0.5	2	2	
	Debrief with USAID/Zika team with prep	1.5	1.5	1.5		1.5	1.5	
8	Part I findings review workshop with stakeholders with Power Point presentation (including prep)	1.5	1	1		1	1	
9	Draft report that includes Part I and Part II findings and recommendations	15	7	7				7
10	Draft memo to USAID focused on Part II findings and	5	4	4				

	recommendations that are for internal (not public) use only.							
12	GH Pro Report QC Review & Formatting							
13	USAID Report Review							
14	Revise report and memo per USAID comments	12	5	5			.5	3
15	Brown bag at USAID	1	0.5	0.5		0.5	1	
17	USAID approves report							
18	Final copy editing and formatting							
19	508 Compliance editing							
20	Upload Eval Report(s) to the DEC							
	Total estimated LOE per person	105	70	70	11	32	15	10
	Total estimated LOE	105	70	70	44	32	15	10

If overseas, is a 6-day workweek permitted Yes No

Travel anticipated: List international and local travel anticipated by what team members.

To be determined, but will include countries with both full and moderate Zika programming with one country from each region: Central America, South America and the Caribbean.

XIV. LOGISTICS

Visa Requirements

List any specific Visa requirements or considerations for entry to countries that will be visited by consultant(s):

Special travel requirements for Nicaragua (USAID can provide guidance)

List recommended/required type of Visa for entry into counties where consultant(s) will work

Name of Country	Type of Visa		
	<input type="checkbox"/> Tourist	<input type="checkbox"/> Business	<input type="checkbox"/> No preference
	<input type="checkbox"/> Tourist	<input type="checkbox"/> Business	<input type="checkbox"/> No preference
	<input type="checkbox"/> Tourist	<input type="checkbox"/> Business	<input type="checkbox"/> No preference
	<input type="checkbox"/> Tourist	<input type="checkbox"/> Business	<input type="checkbox"/> No preference

Clearances & Other Requirements

Note: Most Evaluation/Analytic Teams arrange their own work space, often in their hotels. However, if Facility Access is preferred GH Pro can request it.

GH Pro does not provide Security Clearances, but can request **Facility Access**. Please note that Facility Access (FA) requests processed by USAID/GH (Washington, DC) can take 4-6 months to be granted. If you are in a Mission and the RSO can grant a temporary FA, this can expedite the process. If FA is granted through Washington, DC, the consultant must pick up his/her FA badge in person in Washington, DC, regardless of where the consultant resides or will work.

If **Electronic Country Clearance (eCC)** is required, the consultant is also required to complete the **High Threat Security Overseas Seminar (HTSOS)**. HTSOS is an interactive e-Learning (online) course designed to provide participants with threat and situational awareness training against criminal and terrorist attacks while working in high threat regions. There is a small fee required to register for this course. [Note: The course is not required for employees who have taken FACT training within the past five years or have taken HTSOS within the same calendar year.]

If eCC is required, and the consultant is expected to work in country more than 45 consecutive days, the consultant must complete the one week **Foreign Affairs Counter Threat (FACT) course** offered by FSI in West Virginia. This course provides participants with the knowledge and skills to better prepare themselves for living and working in critical and high threat overseas environments. Registration for this course is complicated by high demand (must register approximately 3-4 months in advance). Additionally, there will be the cost for one week's lodging and M&IE to take this course.

Check all that the consultant will need to perform this assignment, including USAID Facility Access, GH Pro workspace and travel (other than to and from post).

USAID Facility Access (FA)

Specify who will require Facility Access: _____

Electronic County Clearance (ECC) (International travelers only)

High Threat Security Overseas Seminar (HTSOS) (required with ECC)

Foreign Affairs Counter Threat (FACT) (for consultants working on country more than 45 consecutive days)

GH Pro workspace

Specify who will require workspace at GH Pro: _____

Travel -other than posting (specify): _____

Other (specify): _____

XV. GH PRO ROLES AND RESPONSIBILITIES

GH Pro will coordinate and manage the evaluation/analytic team and provide quality assurance oversight, including:

- Review SOW and recommend revisions as needed
- Provide technical assistance on methodology, as needed
- Develop budget for analytic activity
- Recruit and hire the evaluation/analytic team, with USAID POC approval

- Arrange international travel and lodging for international consultants
- Request for country clearance and/or facility access (if needed)
- Review methods, workplan, analytic instruments, reports and other deliverables as part of the quality assurance oversight
- Report production - If the report is public, then coordination of draft and finalization steps, editing/formatting, 508ing required in addition to and submission to the DEC and posting on GH Pro website. If the report is internal, then copy editing/formatting for internal distribution.

XVI. USAID ROLES AND RESPONSIBILITIES

Below is the standard list of USAID’s roles and responsibilities. Add other roles and responsibilities as appropriate.

USAID Roles and Responsibilities
<p>USAID will provide overall technical leadership and direction for the analytic team throughout the assignment and will provide assistance with the following tasks:</p> <p>Before Field Work</p> <ul style="list-style-type: none"> ● <u>SOW</u>. <ul style="list-style-type: none"> ○ Develop SOW. ○ Peer Review SOW ○ Respond to queries about the SOW and/or the assignment at large. ● <u>Consultant Conflict of Interest (COI)</u>. To avoid conflicts of interest or the appearance of a COI, review previous employers listed on the CV’s for proposed consultants and provide additional information regarding potential COI with the project contractors evaluated/assessed and information regarding their affiliates. ● <u>Documents</u>. Identify and prioritize background materials for the consultants and provide them to GH Pro, preferably in electronic form, at least one week prior to the inception of the assignment. ● <u>Local Consultants</u>. Assist with identification of potential local consultants, including contact information. ● <u>Site Visit Preparations</u>. Provide a list of site visit locations, key contacts, and suggested length of visit for use in planning in-country travel and accurate estimation of country travel line items costs. ● <u>Lodgings and Travel</u>. Provide guidance on recommended secure hotels and methods of in-country travel (i.e., car rental companies and other means of transportation). <p>During Field Work</p> <ul style="list-style-type: none"> ● <u>Mission Point of Contact</u>. Throughout the in-country work, ensure constant availability of the Point of Contact person and provide technical leadership and direction for the team’s work. ● <u>Meeting Space</u>. Provide guidance on the team’s selection of a meeting space for interviews and/or focus group discussions (i.e. USAID space if available, or other known office/hotel meeting space). ● <u>Meeting Arrangements</u>. Assist the team in arranging and coordinating meetings with stakeholders. ● <u>Facilitate Contact with Implementing Partners</u>. Introduce the analytic team to implementing partners and other stakeholders, and where applicable and appropriate prepare and send out an introduction letter for team’s arrival and/or anticipated meetings.

After Field Work

- Timely Reviews. Provide timely review of draft/final reports and approval of deliverables.

XVII. ANALYTIC REPORT

Provide any desired guidance or specifications for Final Report. (See [How-To Note: Preparing Evaluation Reports](#))

The **Evaluation Final Report** must follow USAID's Criteria to Ensure the Quality of the Evaluation Report (found in Appendix I of the [USAID Evaluation Policy](#)).

- a. The report should not be more than **30 pages** (excluding executive summary, table of contents, acronym list and annexes).
- b. The structure of the report should follow the Evaluation Report template, including branding found [here](#) or [here](#).
- c. Draft reports must be provided electronically, in English, to GH Pro who will then submit it to USAID.
- d. For additional Guidance, please see the Evaluation Reports to the How-To Note on preparing Evaluation Draft Reports found [here](#).

Reporting Guidelines: The draft report should be a comprehensive analytical evidence-based evaluation/analytic report. It should detail and describe results, effects, constraints, and lessons learned, and provide recommendations and identify key questions for future consideration. The report shall follow USAID branding procedures. ***The report will be edited/formatted and made 508 compliant as required by USAID for public reports and will be posted to the USAID/DEC.***

The findings from the evaluation, Parts I & II, will be presented in a draft report at a full briefing with USAID and at a follow-up meeting with key stakeholders. The report should use the following format:

- Executive Summary: concisely state the most salient findings, conclusions, and recommendations (not more than 4 pages);
- Table of Contents (1 page);
- Acronyms
- Evaluation/Analytic Purpose and Evaluation/Analytic Questions (1-2 pages)
- Project [or Program] Background (1-3 pages)
- Evaluation/Analytic Methods and Limitations (1-3 pages)
- Findings (organized by Evaluation/Analytic Questions)
- Conclusions
- Recommendations
- Annexes
 - Annex I: Evaluation/Analytic Statement of Work
 - Annex II: Evaluation/Analytic Methods and Limitations
 - Annex III: Data Collection Instruments
 - Annex IV: Sources of Information

- List of Persons Interviews
- Bibliography of Documents Reviewed
- Databases
- [etc]
- Annex V: Disclosure of Any Conflicts of Interest
- Annex VI: Statement of Differences (if applicable)
- Annex VII: Summary information about evaluation team members, including qualifications, experience, and role on the team.

The evaluation methodology and report will be compliant with the USAID Evaluation Policy and Checklist for Assessing USAID Evaluation Reports

The Evaluation Report should **exclude** any **potentially procurement-sensitive information**, and information designated for USAID internal use only. As needed, any procurement sensitive information or other sensitive but unclassified (SBU) information will be submitted in a memo to USIAD separate from the Evaluation Report.

All data instruments, data sets (if appropriate), presentations, meeting notes and report for this evaluation/analysis will be submitted electronically to the GH Pro Program Manager. All datasets developed as part of this evaluation will be submitted to GH Pro in an unlocked machine-readable format (CSV or XML). The datasets must not include any identifying or confidential information. The datasets must also be accompanied by a data dictionary that includes a codebook and any other information needed for others to use these data. Qualitative data included in this submission should not contain identifying or confidential information. Category of respondent is acceptable, but names, addresses and other confidential information that can easily lead to identifying the respondent should not be included in any quantitative or qualitative data submitted.

XVIII. USAID CONTACTS

	Primary Contact	Alternate Contact 1	Alternate Contact 2
Name:	Julie Gerdes (NDH)	Christina Chappell (DH)	Arianna Serino
Title:	Zika Technical Advisor	Deputy Director	Zika Technical Advisor
USAID Office:	LAC/RSD	GH/ID	GH/ID
Email:	jgerdes@usaid.gov	cchappell@usaid.gov	aserino@usaid.gov
Telephone:	202-712-4062	571-551-7464	571-551-7399
Cell Phone:	757-619-9736		

List other contacts who will be supporting the Requesting Team with technical support, such as reviewing SOW and Report (such as USAID/W GH Pro management team staff)

	Technical Support Contact 1	Technical Support Contact 2
Name:	Anne Palaia	
Title:	Senior Evaluation Advisor	
USAID Office:	USAID/Bureau for Global Health/Office of Policy, Programs and Planning (P3)	
Email:	apalaia@usaid.gov	
Telephone:	571 551 7098	
Cell Phone:	571-225-0714 (preferred)	

XIX. OTHER REFERENCE MATERIALS

Documents and materials needed and/or useful for consultant assignment, that are not listed above

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XX. ADJUSTMENTS MADE IN CARRYING OUT THIS SOW AFTER APPROVAL OF THE SOW (To be completed after Assignment Implementation by GH Pro)

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SOW Annex I: List of USAID Zika Partners

Service Delivery:

Partner	Project	Brief Description	Locations
URC	Applying Science to Strengthen and Improve Systems (ASSIST)	Support the development of clinical care and support guidelines and quality improvement at provider, facility and systems levels to strengthen maternal, newborn and child health (MNCH) programs in the context of Zika.	El Salvador, Guatemala, Honduras, DR, Nicaragua, Jamaica, Peru, Ecuador, Paraguay
International Planned Parenthood Federation (IPPF)	Support for International Family Planning Organizations 2 (SIFPO II)	Integrate Zika information into existing contraceptive counseling within IPPF network; strengthen the provision of the full range of SRH services, focused on underutilized family planning methods or where provider skills are lacking, such as LARCs and emergency contraceptives, especially to reach the most vulnerable; and developing protocols for counseling of pregnant women and their partners on Zika, including the full range of postpartum family planning options.	DR, Guatemala, El Salvador, Honduras, Nicaragua, Colombia
Jhpiego	Maternal and Child Survival Program (MCSP)	Rapid landscape and collection of any existing tools and materials on Zika for providers and lower level systems managers, including job aids, training materials, resources for local health authorities, across the continuum of pregnancy, birth and early childhood development.	Scoping visits to Honduras, El Salvador, Guatemala and DR with FY15 funds. FY16 funds supporting STTA in St Lucia, Guyana, Grenada, T&T, Barbados. Bilateral programming in Haiti through MCSP's SSQH project in May 2016-Dec 2017)
Chemionics (Prime)	USAID Global Health Supply Chain Program Procurement and Supply Management (GHSC-PSM)	Procurement of condoms under GHSC-PSM TO1 to support pregnant women to avoid sexually transmitted Zika virus from their partners. Procurement of insect repellent under TO4 to support pregnant women to avoid Zika infection through mosquito bites.	Colombia, DR, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Nicaragua

Social and Behavior Change Communication

Partner	Project	Brief Description	Locations
John Hopkins University	Health Communication Capacity Collaborative (HC3)	Development/adaptation of national-level SBCC strategy documents; downstream activities associated with implementation of audience segmentation and profiling; message harmonization; and establishment of rumor monitoring systems to inform ongoing refinement of communication outputs.	Honduras, DR, El Salvador, Guatemala <i>(note: ended in Sept 2017)</i>
Population Services International (PSI)	Support for International Family Planning Organizations 2 (SIFPO II)	Design and implementation of national-level, multi-channel SBCC campaigns, including audience segmentation, pretesting and materials development for various audiences; Ongoing monitoring of SBCC programs and sharing of data with NGO and non-NGO partners, with emphasis upon continued refinement of messages and activities based on reach, recall, and impact.	DR, Honduras, El Sal, Guate, Barbados, St. Lucia, T&T, Guyana, Grenada
UNICEF	UNICEF Umbrella Grant	Design and implementation of multi-channel SBCC campaigns with Government and partners. Implement behavioral change communication programs with government and partners on the ground and national and sub-national campaigns through schools and other institutional structures.	DR, El Salvador, Guatemala, Honduras, Nicaragua, Peru, Paraguay
Johns Hopkins Center for Communication Programs	Breakthrough ACTION	Breakthrough ACTION: Support stakeholders (Ministries and other partners) in developing strategic documents and operational plans to appropriately guide national and subnational SBCC initiatives to address Zika.	Guatemala, Honduras, El Salvador, DR, Jamaica, Peru, Nicaragua, Paraguay <i>(note: began Sept 2017)</i>
Population Council	Breakthrough RESEARCH	Breakthrough RESEARCH: Convene and engage a broad range of health and development stakeholders, supporting them in developing, promoting, and operationalizing visionary, consensus-driven agendas for SBC research that contribute to measurable global health	DR, Guatemala, El Salvador, Honduras <i>(note: began Sept 2017)</i>

Partner	Project	Brief Description	Locations
		impact. This activity will be focused on the prioritization of behaviors for Zika prevention and document lessons learned from SBCC programming in the USAID Zika response.	
Abt. Associates, Inc.	Strengthening Health Outcomes through the Private Sector (SHOPS) Plus	Strategic social and behavior change communications activities designed to mobilize communities, sensitive providers on key prevention messages, and disseminate family planning, prenatal care, and neonatal care messages at the community level.	Haiti (<i>note: funding ended in Sept 2017</i>)

Vector Control

Partner	Project	Brief Description	Locations
Pan American Health Organization (PAHO)	Pan American Health Organization (PAHO)	Support inclusion of quality vector control approaches into national VC programs	Regional, all of LAC
Abt Associates Inc.	The Zika Airst Project (ZAP)	Coordination of vector control approaches, resistance monitoring, and capacity building for GPS mapping of breeding sites	DR, Ecuador, El Salvador, ESC, Jamaica, Guatemala, Haiti, Honduras, Nicaragua, Peru, Paraguay

Community Engagement

Partner	Project	Brief Description	Locations
Save the Children	Community Action against Zika (CAZ)	Strengthen communities' and individuals' capacity to prevent Zika through community empowerment and mobilization related to vector control, improve capacities of vulnerable populations, and increase communities' capacity to participate actively in community surveillance measures.	Colombia, DR, El Salvador, Honduras, Nicaragua
	MCDI	Build capacity at the local government level and with Community-Based Organizations,	El Salvador, Guatemala

Partner	Project	Brief Description	Locations
		women's groups, youth and school groups, churches, etc., to respond to Zika.	
CARE	Integrating Community Health	Increase community, local and national capacities to respond to the Zika Virus outbreak and other infectious diseases through Disaster Risk Reduction (DRR) and community centric human rights approaches.	Ecuador, Peru
Sustainable Science Institute (SSI)	Integrating Community Health	Develop an innovative community-based intervention for Zika prevention combining the successful Care Group (CG) methodology with mHealth technology.	Nicaragua
IFRC	IFRC PIO	Reduce risks associated with Zika infection by mobilizing Red Cross National Societies and volunteers to support intensive community level activities in ten or more Caribbean countries.	ESC, Haiti, Jamaica, Belize
Global Communities	Nuestra Salud	Mobilize a rapid response to create a sustainable framework for engagement in poor and vulnerable communities.	Honduras

Grand Challenges

Partner	Project	Brief Description	Locations
Johns Hopkins Center for Communication Programs	Innovation:	New Habit Formation for Zika Prevention using a Rapid SBCC Habit Optimization Tool (R-SHOT)	Honduras, United States
Institute for Global Environmental Strategies	Innovation:	Crowdsourced Science and Action: The Mosquito Challenge Community Campaign	Brazil, Peru, United States
Premise Data	Innovation:	A Data-Driven Solution for Prevention and Eradication of Zika	Colombia, United States
Dimagi	Innovation:	Identifying and Forecasting Zika Hot Spots by Finding the Data Cold Spot	Guatemala, United States

Partner	Project	Brief Description	Locations
Dalberg Data Insights	Innovation:	Telecom Data for Enhanced Zika Surveillance	Brazil, Belgium
BluSense	Innovation:	Viro-Track	Brazil, Denmark
Liverpool School of Tropical Medicine (LSTM)	Innovation:	Affordable scalable low-technology transfluthrin emanators for protecting against Zika transmission in low-income countries	Tanzania, Haiti, United Kingdom
Queensland Institute of Medical Research (QIMR) Berghofer Medical Research Institute (+5 partners)	Innovation:	Zika: A fast new intervention and an innovative method of evaluation	Mexico, United Kingdom, United States, Australia
Ifakara Health Institute (IHI)	Innovation:	Creating low-cost repellent-treated sandals that provide round-the-clock protection against dengue, Zika, chikungunya and malaria	Brazil, Tanzania
Barcelona Institute for Global Health (ISGlobal)	Innovation:	Preventing infectious bites: Repulsing mosquito vectors with electric field pulsations	Guyana, Spain, Germany
WeRobotics	Innovation:	Fighting Future Threats Using Autonomous Aerial Robotics Solutions	Brazil, Peru, United States, Switzerland, Austria
The Trustees of Indiana University	Innovation:	Field Assessment of Yeast Interfering RNA Larvicides Targeting Zika Vector Mosquitoes	Trinidad and Tobago, United States
Michigan State University	Innovation:	Develop a Wolbachia-based strategy for Zika vector control in Central and South America	Mexico, United States

Partner	Project	Brief Description	Locations
Monash University	Innovation:	Pilot deployment of Wolbachia technology to reduce transmission of Aedes aegypti-borne diseases in Colombia	Colombia, Australia
Fundacao De Apoio A Fisica E A Quimica (University of Sao Paulo)	Innovation:	An Intelligent Trap and Mobile Application to Motivate Local Mosquito Control Activities	Brazil, United States
Queensland Alliance for Agriculture and Food Innovation, The University of Queensland	Innovation:	Near infrared spectroscopy: A rapid and novel surveillance tool for detecting arbovirus transmission hotspots in Brazil	Brazil, Australia
Johns Hopkins University	Innovation:	VectorWEB: A low-cost network of cloud connected ovitraps for automated mosquito surveillance	Brazil, Puerto Rico, India, United States
Stanford University	Innovation:	VectorChip	Brazil, Madagascar, United States
Dalberg	Innovation:	Engage HCD	India, Sierra Leone, Senegal, Tanzania, Haiti, United Kingdom
Boston Consulting Group	Innovation:	Introduction and Scale-up Planning, Facilitating, and Capacity Building (PFC)	Brazil, Colombia, Tanzania, Vietnam, Australia, United States, Denmark
Monash University	Innovation:	Pilot deployment of Wolbachia technology to reduce transmission of Aedes aegypti-borne diseases in Colombia	Colombia, Australia, United States

ANNEX II. EVALUATION METHODS AND LIMITATIONS

The Performance Evaluation of USAID's Zika response in the LAC region used mixed methods to collect data related to the following five evaluation questions:

1. What enabled the successful achievement of program objectives and why? What barriers hindered the successful implementation of objectives and why?
2. What specific practices and features of the USAID Zika program have enabled or limited programmatic alignment and useful information sharing among partner governments and implementing partners and why?
3. How has the USAID Zika response strengthened and supported existing vector control, service delivery or social and behavior change communication systems?
4. Using Zika as a case study, what did USAID consider in making programmatic decisions for the Zika response and what additional information would have been valuable for these decisions? Based on this experience, what criteria should USAID consider in making programmatic decisions during a health emergency response?
5. Using Zika as a case study, how did implementation at each level (community/local, national, and regional) contribute to meeting USAID's goal, and how could this implementation inform future health emergency responses?

A document review of Zika-related publications (e.g., journal articles, news stories), USAID program documents (strategies and frameworks, country briefings), IP documents (workplans, reports, M&E plans, assessments), and relevant tools was conducted to inform tool design, understand the work of the various IPs, identify cross-cutting issues, and note country-specific challenges and opportunities. Documents for this initial review were identified through three main sources: (1) USAID point persons provided IP-related documents, (2) Zika Communication Network website (<https://www.zikacommunicationnetwork.org/>), and (3) evaluation team literature searches. Documents were categorized into groups and reviewed with a focus on content addressing the main evaluation questions. Some additional documents were provided to the evaluation team at the country level, and were used to better understand contextual factors within that country.

Background briefings and informational interviews were conducted with core USAID/Washington, D.C. Zika team members. These initial efforts had a twofold purpose: (1) to gain insights into the Zika program, and (2) to begin to identify input that would answer the evaluation questions.

Qualitative data were collected by in-depth interviews of Zika stakeholders in Washington, D.C., and the respective response countries, as well as group interviews at the country level among community leaders and implementing partner staff. Information from these interviews served to answer evaluation questions and to design the online survey questions.

The two online surveys used closed-ended questions and were conducted among USAID Zika technical advisors and other relevant USAID officials, as well as Zika response IPs.

The convenience samples for the in-depth interviews and online surveys included:

- USAID Zika advisors in Washington, D.C., and in the field
- Project AORs and CORs
- MOH officials
- Key USAID personnel involved in program design
- Community/local, national, and regional stakeholders (such as host country government officials, PAHO, and IPs)

Participant names were provided by USAID and in-country stakeholders. A final list of all interviewees can be found in Annex V.

To ensure consistency, foster engagement, and elicit input, the evaluation team participated in selected partner meetings, and had weekly meetings with the Zika evaluation USAID point of contact (Julie Gerdes).

DATA COLLECTION, MANAGEMENT, AND ANALYSIS

Data collection

For the document review, the team used notes to pull out information related to the evaluation including document title, source (author), key area covered, and main findings/points of interest. These were discussed by team members, and mutual agreement was reached on what was relevant and needed to be further explored during interviews and/or integrated into survey tools.

In-depth interview guides were developed and translated into Spanish. These were back-translated to ensure consistency with the English versions. All interviews were conducted in either Spanish or English, based on respondent preferences, and participants were given the option to respond in English and/or Spanish. Interviews were conducted in locations that provided audio and visual privacy. In-depth interviews were recorded when informants provided consent, and evaluation team members took notes during the interviews to capture key points, summarize interviews, and note any contextual factors that may have influenced responses (e.g., interviewee had limited time, others were present during discussions, rooms were not fully private). Group interviews were held in locations that facilitated conversations and minimized external disruptions such as noise and foot traffic. Participation incentives were not provided to in-depth or group interview participants.

In-depth interviews were conducted either face-to-face or via telephone. Face-to-face interviews were conducted during country visits to Colombia, the Dominican Republic, Honduras, Jamaica, and Paraguay between August 13, 2018 and October 12, 2018.

The evaluation team explained the purpose of the interviews, assured interviewees of the confidentiality of their responses, and answered any questions participants had prior to obtaining verbal consent from all participants.

Data management

Evaluation team members filed documents reviewed into folders based on document type, and used a standard nomenclature to name electronic and audio files. All data were stored electronically and copied onto a secured, online (cloud-based) folder; this allowed interview files to be reviewed by the evaluation specialist and any relevant feedback to be given to evaluation team members on a timely basis.

After the finalization of the report draft, all survey data were stripped of any identifying information and shared publicly via the DDL. All qualitative data will be stored by GH Pro in a password-protected file for a specific amount of time before being permanently deleted.

Data analysis

Qualitative data analysis was conducted in four steps:



Coding

The entire qualitative dataset from the in-depth and group interviews was coded for thematic analysis. Codes were descriptive to facilitate consolidation, which then served to identify themes under which codes were grouped. That is, several codes were able to feed into a central theme that was linked to a particular evaluation question. This involved identifying clusters of information within the dataset of similar meaning across codes.

Themes

Initial themes were identified through a review and grouping of the coded information. Three questions were considered during this process:

1. Is this candidate theme relevant to answering the central evaluation questions?
2. Is this theme evident across more than one data code?
3. Is there a central organizing concept around each theme?

Themes linked to the evaluation questions were identified, and codes were grouped into each theme; any data codes not fitting into themes were organized under “miscellaneous” and were reviewed to identify additional themes.

Reviewing themes

This quality control step was undertaken to ensure codes were correctly categorized into the various themes. The entire dataset was reviewed and codes verified to ensure grouping into the correct themes.

Defining themes

Final themes were identified based on the following criteria: (1) focused, (2) do not overlap, and (3) directly link to evaluation questions. The following themes were identified: (1) value added and results of activities, (2) sustainability, (3) coordination and collaboration, (4) challenges, and (5) lessons learned.

At the analysis stage, content was sorted by thematic area and grouped by evaluation question(s), and then summarized as findings. The analysis team also looked at data provided by IP and USAID staff. This allowed the team to explore whether different themes emerged across different respondent groups.

Quantitative data from the online surveys was extracted into Microsoft Excel, and summary statistics were presented, including the number of respondents by question and the percentage answering the specific options (e.g., 20 people answered question 1; 10 percent responded “a”, 50 percent responded “b”, etc.). These results were linked to complementary, qualitative data.

Final results brought together data and information from both the qualitative and quantitative data collection, and included graphs and tables supported by summaries of qualitative data, which included interview quotes.

Limitations

Limitations to the document review methodology included that some documents did not contain comprehensive information or represented a specific perspective that needed to be documented to assure correct understanding. In addition, while the team endeavored to ensure completeness in its document search, it is acknowledged that some documents may have been missed due to limited time or public availability of documents. These challenges were addressed by noting document sources and authors, and by asking individuals in Washington, D.C., and in response countries for additional documents and available resources.

Limitations to the methodology included the use of convenience sampling, limited in-country time, the availability of stakeholders, and the inability to travel to some areas within countries due to security concerns. The team overcame these through identifying additional individuals to interview throughout the evaluation, and triangulating information from in-depth interviews, document reviews, and online survey results. The team also made follow-up telephone calls to interview previously unavailable stakeholders or those in locations where security concerns limited the team's ability to travel.

ANNEX III. DATA COLLECTION INSTRUMENTS

Evaluation information was collected through various sources. An interview guide for use with all participants (USAID, IPs, and other key stakeholders, including ministry officials) was developed to inform key informant interviews (KIIs); this guide was translated into Spanish to facilitate data collection at the country level.

Two largely closed-ended surveys were developed for use online (via the SurveyMonkey platform). One survey was aimed at USAID staff, including Zika advisors, and the second was used among IPs. Similar to the KII guides, the survey for IPs was also translated into Spanish.

KII GUIDE

ZIKA EVALUATION KEY INFORMANT INTERVIEW GUIDE

For use with all participants

Introduction: We are conducting an independent performance evaluation of the USAID Zika Program in the Americas and Caribbean. The evaluation focuses on the USAID Zika Program as a whole and is not intended as an evaluation of individual partners or agreements.

As part of this, we are conducting key informant interviews in order to gain your perspective on USAID's contributions in terms of activities supported, achievements to date, lessons learned, challenges faced and recommendations moving forward.

Interviews will last approximately one hour* and your participation is voluntary- you may refuse to answer any question in the interview or stop the interview at any time, without repercussion or penalty. Feel free to respond in English and/or Spanish. All information being collected will be kept confidential. Personal identifying information is for the evaluation team only and will not be shared.

Do you agree to participate? Yes / No

Do we have your permission to record the conversation? Yes / No

Note to interviewer: Circle one. If no, thank the participant for their time and end the interview.

Interviewee name and title:

Interview date (dd/mm/yy):

Country:

Organization:

* It is currently estimated the entire interview (all questions) takes closer to 90 minutes but not everyone answers all questions

Note to interviewer: Make clear to participant that the focus of the evaluation is on USAID supported activities. Specifically, the evaluation aims to understand the value added by USAID supported activities

in the Zika response, and how these may benefit future responses to health emergencies. Areas explored in the interviews include benefits, coordination, challenges and recommendations moving forward.

Interviewer tips:

- Make sure to **transition** between areas to ease the flow of conversation. A sentence like, "We are now going to talk about..." will help participants to better answer questions. **Suggested transitions are found throughout this interview guide but interviewers should feel free to use their own words.**
- Interviews flow like conversations, and participants will most likely address questions in a non-sequential fashion. This is fine as long as the interviewer captures participant input, and makes sure none of the questions are asked. **It is important for interviewers to be familiar with the tool and the questions to be asked.**
- **Recapping** what you heard as the interviewer is useful to make sure you have captured, and understood, what the participant is sharing. This also helps as a way to begin probing deeper into their responses. For example, "You mentioned that the community engagement was important, could you please explain to me exactly why...."

Note to interviewers: File "KII interview mapping.doc" maps out who responds to each question.

Topic area: Individual and organizational background

Suggested transition: We would like to begin by asking questions to better understand your and your organization's Zika related activities.

1. What Zika-related activities does your organization/department (if government) implement in **(LAC or specify country name)**?

Note to interviewer: Let participant respond spontaneously, if they do not mention specific program areas, prompt by asking about activities under service delivery, SBCC, vector control, community engagement; include probing around improvement of national and sub-national programs to better respond to health emergency responses

2. Could you share you or your organization's/institution's experience in infectious disease and/or rapid response?

Note to interviewer: Explore participant's individual role and their experience/background in public health, work in emergency response.

Topic area: Value added and results achieved

Suggested transition: We'd like to now explore your perceptions of the value and results of these activities.

3. What activities do you feel are/were particularly important/relevant in the Zika response in (LAC, or specific country name)?
 - 3.1 Why are/were these important/relevant?

Note to interviewer: If not spontaneously mentioned, prompt to explore SBCC (e.g., guideline development around 7 behaviors), vector control (e.g., ovitraps and larviciding), service delivery, community engagement. (e.g., education).

4. In your area of work, what are the greatest achievements/results of the activities that are being carried out?
 - 4.1. Why do you feel these were successful?
 - 4.2. Did you see, or are you aware of, successes and achievements in other activity areas of the Zika response? If yes, what were these?
 - 4.3. What were existing enabling factors that contributed to this success?

Note to interviewer: Ask about relationships within the community and different sectors and experiences with past related activities (emergency or otherwise—dengue or chikungunya for example), with local government, as well as organizational leadership, and their experience).
5. Are or were there any activities that, in retrospect, were not necessary within the context of an emergency health response?
 - 5.1. What are/were these and why?
6. How did the urgency of the work affect the implementation of the Zika program, either positively or negatively?

Note to interviewer: If not spontaneously mentioned, prompt to explore what facilitated a timely response or, in the case that it took a long time, how the organization dealt with this.
7. Are there any context-specific issues/opportunities that you feel were instrumental in achieving these results?

Note to interviewer: If not spontaneously mentioned, prompt to explore coordination mechanisms, country ownership and willingness to engage, community engagement, leadership, political instability (turnover, issues of security), natural disasters.

Topic area: Coordination and collaboration⁴⁶

Suggested transition: We'd now like to understand the bigger picture of the Zika response in this country by exploring coordination among and across stakeholders.

8. Within your organization/institution, how is the response coordinated?

Note to interviewer: If not spontaneously mentioned, prompt to explore coordination across different program areas, human resource mobilization, leadership to facilitate coordination.
9. What stakeholders do you coordinate and/or collaborate with in implementing Zika activities? And how?

Note to interviewer: Ask about stakeholders at different levels: community/local, national and/or regional.
10. At what level does this coordination and/or collaboration occur and how is it done?

Note to interviewer: Specify level(s) relevant to the respondent- community/local, national and/or regional. If not spontaneously mentioned, prompt to explore how coordination and collaboration was enhanced, through technical working groups for example, and which reduced duplication and/or fostered sharing of lessons learned. If not spontaneously mentioned, also

⁴⁶ Coordination is defined as efforts to reduce duplication. For collaboration, the team defines this as the process of sharing lessons learned.

prompt to explore how or if USAID contributed to the cross-country (one-to-one) and regional coordination process.

11. Do these coordination efforts reduce duplication, if so how?

Note to interviewer: Get concrete examples

12. Did these collaboration efforts help share usable lessons learned?

- 12.1 If so, how?

Note to interviewer: By usable we mean lessons and experiences from other countries (for example) that were relevant to the country and could be adapted and used.

13. How would you improve current coordination and/or collaboration efforts in the short term?

- 13.1 How will these coordination and/or collaboration efforts continue after USAID's response ends?

Note to interviewer: By short term we mean within the next year (12 months).

14. Based on your experience with the Zika response, what would you advise for future coordination and collaboration efforts to address emergency health responses?

Topic area: Challenges

Suggested transition: We understand that any program faces challenges when it comes to planning and implementation. We'd like to now explore some of the challenges you or your organization faced and how you responded to them.

15. Please share with us any challenges your organization/institution face (or faced) in planning, implementing or reporting Zika activities.

- 15.1 How are, or were, these addressed?

Note to interviewer: If not spontaneously mentioned, prompt to explore leadership, objectives, coordination, changing context and shifting priorities.

16. What are your recommendations to avoid these challenges or mitigate their impact for future emergency health responses?

Topic area: Lessons learned

Suggested transition: Implementation often leads to lessons for future programming. We would like to capture some of these lessons to inform future USAID programs across the world as well as Ministries' ongoing Zika efforts in the region:

17. What critical lessons have been learned so far in implementing these activities?

Note to interviewer: If not spontaneously mentioned, prompt to explore leadership, coordination, clarity on roles and responsibilities, scientific evidence, country and community engagement, including enabling environment. Get concrete examples including the contextual information related to the lesson that may affect replicability (e.g., country ownership and buy-in; strong partner collaboration, in-country expertise and financial resources).

18. As country responses to Zika shift from a new outbreak to a chronic disease response, what is needed to further mitigate and prevent Zika-related outcomes?

- 18.1 How will these needs be met?

Note to interviewer: If not spontaneously mentioned, prompt to explore leadership, coordination, service delivery, SBCC, vector control, community engagement and organizational capacity development, specifically of country programs; ask about activities needed to transition to country ownership.

19. Are there activities you feel were missing from this emergency health response that would have been beneficial?
20. Taking what you have learned so far from this experience, what are the key features of the response that you feel would be relevant to future programs related to health emergency responses?

Note to interviewer: If not spontaneously mentioned, prompt to explore country leadership and commitment, coordination, key activities under each service delivery, SBCC, vector control, community engagement and organizational capacity development.

Topic area: Operations and investment within a health emergency

Suggested transition: We would now like to explore procurement and staffing, and get your impressions about how these worked, or did not work, in the Zika response.

Note to interviewers: with the exception of the first question in this section, remember that these are largely only for USAID staff, including Zika advisors.

21. How would you describe the USAID Zika program's procurement, budgeting and staffing structure (e.g., central mechanisms, grants, congressional note-driven, Zika task force and Zika core team)?

Note to interviewer: Only procurement and staffing elements will be asked of IPs

22. Why did USAID make these programmatic decisions for the Zika response?

23. In what ways did these programmatic decisions facilitate or hinder the response?

Note to interviewer: Explore procurement element with IPs; with USAID explore procurement, budgeting and staffing structure.

24. What was the major reasoning and purpose of working at the various organizational levels (e.g., regional, national, and/or community/local level) for the Zika program?

25. Was the appropriate level of effort put into each level (e.g., regional, national and local/community) in the Zika program?

26. What are the major achievements of working at the regional, national, and/or community/local level(s)?

Note to interviewers: Ask about each level relevant to the respondent.

27. Do the achievements you mention for [specify level(s) you are talking about] require work at other levels to achieve these results?

27.1 Please explain.

28. How might your answer change under different country/region or disease scenario?

This is the end of the interview. Thank the participant for their time, **suggested transition:** Thank you for the time you took to meet and discuss with us, we sincerely appreciate your input into this evaluation effort.

ONLINE SURVEY FOR USAID STAFF, INCLUDING USAID ZIKA ADVISORS

USAID online survey

At USAID's request, the Global Health Program Cycle Improvement Project (GHPro) is conducting an independent evaluation of USAID's Zika Program in Latin America and the Caribbean.

The intention of the evaluation is to provide guidance and recommendations for the third and final year of programming and to provide lessons learned to USAID for future health emergencies. As part of this effort, we seek your experience and insights through this online survey.

The survey is confidential and your participation is voluntary. You can skip any questions without negative repercussion or penalty.

Continuing with this survey constitutes your consent.

The survey should take no more than 20 minutes.

1. Where are you based? (Check one box)

1. Headquarters (Washington DC)
2. Regional level
3. Country level

2. Position category: (Check one box)

- a. FSO
- b. FSN/USPSC
- c. GS
- d. USPSC
- e. Institutional Contractor (CAMRIS, Fellow)
- f. Other

3. Briefly describe your current responsibilities within USAID's Zika program:

4. Number of years working in development programs, including in any sector (education, health, etc.) and under any hiring mechanism. (Enter number of years, if less than 1 year enter 0)

5. Number of years' experience working with health or environmental emergency responses: (Enter number of years, if less than 1 year enter "0")

6. Month and year you started working with the USAID Zika response:

Month:

Year:

7. Month and year you stopped working with the USAID Zika response:

Month:

Year:

Still in this position

Please rate the following statements from strongly disagree to strongly agree. Use the space provided to provide any additional information and reasoning behind your response.

USAID’s centralized approach to design and implementation of the Zika program was efficient and effective in terms of:

8. Leadership

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

9. Flexibility

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

10. Timeliness

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

11. Building on field level evidence

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

12. Streamlined communication

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

13. Strengthening Human Resources and systems in LAC

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

14. Leaving capacity for future emergency health response

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

15. Approaches, tools and models* developed and used under this program will continue to be used by countries after USAID Zika support ends.

* these may be specific tools or approaches

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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If so, which ones:

16. I believe USAID's Zika response is on track to achieve its goal.

Note: The USAID Zika program has as its goal to “*Support and strengthen systems for priority countries in their Zika response efforts in order to minimize negative pregnancy outcomes.*”

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

17. USAID did a good job of facilitating how IPs coordinated and collaborated to reduce duplication and share lessons learned

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

Please answer the following questions:

18. What are the barriers to sustained behaviour change, community engagement, and/or vector control at the individual and institutional level?

19. Within the LAC response to Zika, what was USAID's single most significant contribution?

20. If you could add or change one activity you were involved with in this program, what would it be and why?

21. Based on your experience with this program, what should USAID consider when designing and funding future emergency health responses of this kind?

22. Is/are there any other information, experience or concerns you would like to share with the Evaluation Team? If so, please elaborate.

This is the end of the survey, we thank you for the time you took to provide your inputs and insights.

ONLINE SURVEY FOR IMPLEMENTING PARTNERS

Implementing Partner Online Survey

At USAID's request, the Global Health Program Cycle Improvement Project (GHPro) is conducting an independent evaluation of USAID's Zika Program in Latin America and the Caribbean.

The intention of the evaluation is to provide guidance and recommendations for the third and final year of programming and to provide lessons learned to USAID for future health emergencies. As part of this effort, we seek your experience and insights through this online survey.

The survey is confidential and your participation is voluntary. You can skip any questions without negative repercussion or penalty.

Continuing with this survey constitutes your consent.

The survey should take no more than 20 minutes.

1. Where are you based? (Check one box)
 1. Headquarters or Regional level
 2. Country level
2. Primary area of focus within Zika program: (choose one)
 1. Service Delivery
 2. Vector Control
 3. Social and Behavioral Change Communication
 4. Community Engagement
 5. Research, Development and Innovations
 6. Program management/operations
 7. Other (please specify)
3. Number of years working in development including in any sector (education, health, etc.) (Enter number of years, if less than 1 year enter 0)
 - Number of years' experience working with health or environmental emergency responses (Enter number of years, if less than 1 year enter "0")
5. Month and year you started working with the USAID Zika response:
Month:
Year:
6. Month and year you stopped working with the USAID Zika response:
Month:
Year:
Still in this position

Please rate the following statements from strongly disagree to strongly agree. Use the space provided to provide any additional information and reasoning behind your response.

7. Leadership

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
-------------------------------	-------------------	----------	---------------	-------	-------------------

Please explain your answer:

8. Flexibility

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

9. Timeliness

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

10. Building on field level evidence

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

11. Streamlined communication

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
-------------------------------	-------------------	----------	---------------	-------	-------------------

Please explain your answer:

12. Strengthening Human Resources and systems in LAC

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

13. Leaving capacity for future emergency health responses

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

14. Activities implemented addressed country needs for the control and prevention of Zika.

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

15. Activities implemented addressed country needs for the prevention of negative pregnancy outcomes (Congenital Zika Syndrome) at the clinical level.

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

16. Activities implemented addressed country needs for care and support care for mothers and their children affected by Zika.

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

17. Approaches, tools and models* developed and used under this program will continue to be used by countries after USAID Zika support ends.

* these may be specific tools or approaches

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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If so, which ones:

18. Roles and responsibilities between IPs were clear in the Zika response

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

19. USAID did a good job of facilitating how IPs coordinated and collaborated to reduce duplication and share lessons learned

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

20. I believe USAID's Zika response is on track to achieve its goal.

Note: The USAID Zika program has as its goal to *“Support and strengthen systems for priority countries in their Zika response efforts in order to minimize negative pregnancy outcomes.”*

Select one:

Don't know/ Not applicable	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
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Please explain your answer:

Please answer the following questions:

21. If you could add or change one activity you were involved with in this program, what would it be and why?

22. What should USAID consider when designing and funding future emergency health responses of this kind?

23. Is/are there any other information, experience or concerns you would like to share with the Evaluation Team? If so, please elaborate.

This is the end of the survey, we thank you for the time you took to provide your input and insights.

ANNEX IV. BIBLIOGRAPHY OF DOCUMENTS REVIEWED

USAID provided numerous relevant documents, presentations, and project products for team review during the course of this evaluation, including IP workplans and reports, webinars, agendas and meeting reports, and Congressional language. As the team traveled, Zika advisors and USAID missions provided country-specific reporting and project materials used by governments and within communities. Following are additional sources reviewed beyond these materials.

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ANNEX V. PERSONS CONTACTED

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Nidia Martínez, Jefa del Departamento Entomología
Sonia Avalos, Health and Nutrition Officer, UNICEF
Nadia Villalba, Communications, UNICEF
Rigoberto Astorga, UNICEF
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ANNEX VI. ZIKA TIMELINE: 1947–2016

The following timeline was excerpted and shortened from: M. K. Kindhauser, T. Allen, V. Frank, R. S. Santhana, & C. Dye (2016), Zika: The origin and spread of a mosquito-borne virus.” *Bulletin of the World Health Organization*. doi: <http://dx.doi.org/10.2471/BLT.16.171082>. (Use this link to access citations directly). Information on Zika response countries is highlighted in bold.

1947: Scientists conducting routine surveillance for yellow fever in the Zika forest of Uganda isolate the Zika virus in samples taken from a captive, sentinel rhesus monkey. [1](#)

1948: The virus is recovered from the mosquito *Aedes (Stegomyia) africanus*, caught on a tree platform in the Zika forest. [1,2](#)

1952: The first human cases are detected in Uganda and the United Republic of Tanzania, in a study demonstrating the presence of neutralizing antibodies to Zika virus in sera. [3](#)

1954: The virus is isolated from a young girl in Eastern Nigeria. [4](#)

1958: Two further Zika virus strains are isolated from *Aedes africanus* mosquitoes caught in the Zika forest area. [5](#)

1964: A researcher in Uganda, who fell ill while working with Zika strains isolated from mosquitoes, provides the first proof, by virus isolation and re-isolation, that Zika virus causes human disease. [6](#)

1960s–1980s: Zika is now being detected in mosquitoes and sentinel rhesus monkeys used for field research studies in a narrow band of countries that stretch across equatorial Africa. Altogether, the virus is isolated from more than 20 mosquito species, mainly in the genus *Aedes*. [7–14](#)

1969–1983: The known geographical distribution of Zika expands to equatorial Asia, including India, Indonesia, Malaysia, and Pakistan, where the virus is detected in mosquitoes. As in Africa, sporadic human cases occur but no outbreaks are detected, and the disease in humans continues to be regarded as rare, with mild symptoms. Seroprevalence studies in Indonesia, Malaysia, and Pakistan indicate widespread population exposure. [16–19](#)

2007: Zika spreads from Africa and Asia to cause the first large outbreak in humans on the Pacific island of Yap, in the Federated States of Micronesia. Prior to this event, no outbreaks and only 14 cases of human Zika virus disease had been documented worldwide. [20](#)

2008: A U.S. scientist conducting field work in Senegal falls ill with Zika infection upon his return home to Colorado and infects his wife, in what is probably the first documented case of sexual transmission of an infection usually transmitted by insects. [24](#)

2012: Researchers publish findings on the characterization of Zika virus strains collected in Cambodia, Malaysia, Nigeria, Senegal, Thailand, and Uganda, and construct phylogenetic trees to assess the relationships. Two geographically distinct lineages of the virus, African and Asian, are identified. Analysis of virus from Yap Island strengthens previous epidemiological evidence that the outbreak on Yap Island originated in southeast Asia. [7:21-23:25](#)

2013–2014: The virus causes outbreaks in four other groups of Pacific islands: French Polynesia, Easter Island, the Cook Islands, and New Caledonia. [26-27](#) The outbreak in French Polynesia, generating thousands of suspected infections, is intensively investigated. The results of retrospective investigations are reported to WHO on 24

November 2015 and 27 January 2016. These reports indicate a possible association between Zika virus infection and congenital malformations and severe neurological and autoimmune complications. [28](#) . . .

December 2013: A patient recovering from Zika infection on Tahiti Island in French Polynesia seeks treatment for bloody sperm. Zika virus is isolated from his semen, adding to the evidence that Zika can be sexually transmitted. [32](#)

20 March 2014: During the 2013–14 outbreak of Zika virus in French Polynesia, two mothers and their newborns are found to have Zika virus infection, confirmed by PCR performed on serum collected within 4 days of birth. The infants' infections appear to have been acquired by transplacental transmission or during delivery. [33](#)

31 March 2014: During the same outbreak of Zika virus in French Polynesia, 1,505 asymptomatic blood donors are reported to be positive for Zika by PCR. These findings alert authorities to the risk of post-transfusion Zika fever. [34](#)

(Zika in the Americas)

2 March 2015: Brazil notifies WHO of reports of an illness characterized by skin rash in the northeastern states. From February 2015 to 29 April 2015, nearly 7,000 cases of illness with skin rash are reported in these states. All cases are mild, with no reported deaths. Of 425 blood samples taken for differential diagnosis, 13 percent are positive for dengue. Tests for chikungunya, measles, rubella, parvovirus B19, and enterovirus are negative. Zika was not suspected at this stage, and no tests for Zika were carried out.

29 March 2015: Brazil provides further details on reports of an illness, in four northeastern states, characterized by skin rash, with and without fever. The case definition used is “person having rash with or without fever, of unknown etiology, and whose clinical profile does not fit in suspected case definitions of dengue, measles or rubella.” Cases were first identified in Pernambuco in December 2014. In Maranhao, Rio Grande do Norte, and Bahia, cases were identified in February and March 2015.

29 April 2015: Bahia State Laboratory in Brazil informs WHO that samples have tested positive for Zika virus, but full laboratory confirmation is pending.

7 May 2015: Brazil's National Reference Laboratory confirms, by PCR, Zika virus circulation in the country. This is the first report of locally acquired Zika disease in the Americas.

7 May 2015: PAHO and WHO issue an epidemiological alert to Zika virus infection. [35](#)

15 July 2015: Brazil reports laboratory-confirmed Zika cases in 12 states.

17 July 2015: Brazil reports the detection of neurological disorders associated with a history of infection, primarily from the northeastern state of Bahia. Among these reports, 49 cases were confirmed as Guillain-Barré syndrome. Of these cases, all but two had a prior history of infection with Zika, chikungunya, or dengue.

5 October 2015: Health centers in the Republic of Cabo Verde begin reporting cases of illness with skin rash, with and without fever, in the capital city of Praia, on the island of Santiago. By 14 October, 165 suspected cases were reported.

8 October 2015: Brazil reports the results of a review of 138 clinical records of patients with a neurological syndrome, detected between March and August. Of the 138, 58 patients (42 percent) present neurological syndrome with a previous history of viral infection. Of the 58, 32 patients (55 percent) have symptoms that are said to be consistent with Zika or dengue infection.

8 October 2015: Colombia reports the results of a retrospective review of clinical records, which reveals the occurrence, since July, of sporadic clinical cases with symptoms consistent with Zika infection. A sudden spike is reported between 11 and 26 September. Altogether, 90 cases are identified with clinical symptoms consistent with, but not proven to be, Zika infection.

16 October 2015: Colombia reports PCR confirmed cases of locally acquired Zika infection.

21 October 2015: Cabo Verde confirms, by PCR, the country's first outbreak of Zika infection.

22 October 2015: Colombia confirms, by PCR, 156 cases of Zika in 13 municipalities, with most confirmed cases concentrated in the densely populated Bolivar department.

30 October 2015: Brazil reports an unusual increase in the number of cases of microcephaly among newborns since August, numbering 54 by 30 October.

2 November 2015: Suriname reports two PCR confirmed cases of locally acquired Zika infection.

5 November 2015: Colombia confirms, by PCR, 239 cases of locally acquired Zika infection.

11 November 2015: Brazil reports 141 suspected cases of microcephaly in Pernambuco state. Further suspected cases are being investigated in two additional states, Paraiba and Rio Grande do Norte.

11 November 2015: Brazil declares a national public health emergency as cases of suspected microcephaly continue to increase.

12 November 2015: Suriname reports five PCR confirmed cases of locally acquired Zika infection.

12 November 2015: Panama reports cases with symptoms compatible with Zika.

17 November 2015: PAHO and WHO issue an epidemiological alert asking PAHO Member States to report observed increases of congenital microcephaly and other central nervous system malformations under the International Health Regulations. [36](#)

17 November 2015: Brazil reports the detection of Zika virus in amniotic fluid samples from two pregnant women from Paraiba whose fetuses were confirmed by ultrasound examinations to have microcephaly. Altogether, 399 cases of suspected microcephaly are being investigated in seven northeastern states.

21 November 2015: Brazil reports that 739 cases of microcephaly are being investigated in nine states.

24 November 2015: El Salvador reports its first 3 PCR confirmed cases of locally acquired Zika infection.

24 November 2015: French Polynesia reports the results of a retrospective investigation documenting an unusual increase in the number of central nervous system malformations in fetuses and infants from March 2014 to May 2015. At the date of reporting, at least 17 cases were identified with different severe cerebral malformations, including microcephaly, and neonatal brainstem dysfunction.

25 November 2015: Mexico reports three PCR confirmed cases of Zika infection, of which two were locally acquired. **The third case had a travel history to Colombia.**

26 November 2015: Guatemala reports its first PCR confirmed case of locally acquired Zika infection.

27 November 2015: Paraguay reports six PCR confirmed cases of locally acquired Zika infection.

27 November 2015: The Bolivarian Republic of Venezuela reports seven suspected cases of locally acquired Zika infection. Four samples test positive by PCR.

28 November 2015: Brazil detects Zika virus genome in the blood and tissue samples of a baby with microcephaly and other congenital anomalies who died within five minutes of birth.

28 November 2015: Brazil reports three deaths among two adults and a newborn associated with Zika infection. As deaths from Zika infection are extremely rare, these cases are reported in detail.

1 December 2015: PAHO and WHO issue an alert to the association of Zika virus infection with neurological syndrome and congenital malformations in the Americas. The alert includes guidelines for laboratory detection of the virus. [37](#)

2 December 2015: Panama reports its first three PCR confirmed cases of locally acquired Zika infection.

6 December 2015: Cabo Verde reports 4,744 suspected cases of Zika. No neurological complications are reported.

14 December 2015: Panama reports four PCR confirmed cases of locally acquired Zika infection, and 95 cases with compatible symptoms.

15 December 2015: Samples taken from patients in Cabo Verde test positive, by PCR, for Zika.

16 December 2015: Honduras reports two PCR confirmed cases of locally acquired Zika infection.

21 December 2015: French Guiana and Martinique report their first two PCR confirmed cases of locally acquired Zika infection.

22 December 2015: Brazilian researchers publish evidence, drawn from case reports in several countries, that depictions of Zika as “a mild cousin of dengue” may not be accurate due to the possibility of more serious disease symptoms, especially in immunocompromised patients. [38](#)

30 December 2015: Brazil reports 2,975 suspected cases of microcephaly, with the highest number occurring in the north-east region.

31 December 2015: The United States reports the first PCR confirmed case of locally acquired Zika infection in the Commonwealth of Puerto Rico, an unincorporated territory of the United States.

5 January 2016: Researchers report the first diagnoses of intrauterine transmission of the Zika virus in two pregnant women in Brazil, whose fetuses were diagnosed with microcephaly, including severe brain abnormalities, by ultrasound. Although tests of blood samples from both women are negative, Zika virus is detected in amniotic fluid. [39](#)

7 January 2016: The Maldives reports that a Finnish national who worked in the country became ill upon his return to Finland, where he tested positive, by PCR, for Zika infection.

7 January 2016: Scientists in Guyana publish the results of Zika genome sequencing of viruses from four patients in Suriname whose sera were negative for dengue and chikungunya viruses but positive for Zika virus. Suriname strains belong to the Asian genotype and are almost identical to the strain that circulated in French Polynesia in 2013. [40](#)

7 January 2016: Ophthalmologists in Brazil report severe ocular malformations in three infants born with microcephaly. [41](#)

12 January 2016: In collaboration with health officials in Brazil, the United States's CDC and Prevention release laboratory findings (notified to WHO under IHR protocol) of four microcephaly cases in Brazil (two newborns who died in the first 24 hours of life and two miscarriages), which indicate the presence of Zika virus RNA by PCR and by immunohistochemistry of brain tissue samples of the two newborns. In addition, placenta of the two fetuses miscarried during the first 12 weeks of pregnancy test positive by PCR. Clinical and epidemiological investigations in Brazil confirm that all four women presented fever and rash during their pregnancy. The findings are considered the strongest evidence to date of an association between Zika infection and microcephaly. [42](#)

14 January 2016: Guyana reports its first PCR confirmed case of locally acquired Zika infection.

15 January 2016: The United States issues interim travel guidance for pregnant women which, "out of an abundance of caution," advises pregnant women in any trimester to consider postponing travel to areas with ongoing local transmission of the virus, or to take precautions against mosquito bites if they must travel. [43](#)

15 January 2016: Ecuador reports its first two PCR confirmed cases of locally acquired Zika infection. The next day, the country confirms an additional six cases, of which two are locally acquired, three imported from Columbia, and one from the Bolivarian Republic of Venezuela.

15 January 2016: Barbados reports its first three PCR confirmed cases of locally acquired Zika infection.

15 January 2016: The Hawaii Department of Health reports a case of microcephaly in Hawaii, born to a woman who had resided in Brazil early in her pregnancy.

16 January 2016: The Plurinational State of Bolivia reports its first PCR confirmed case of locally acquired Zika infection.

18 January 2016: Haiti reports its first five PCR confirmed cases of locally acquired Zika.

18 January 2016: France reports the first PCR confirmed case of locally acquired Zika in St. Martin.

19 January 2016: El Salvador reports an unusual increase of Guillain-Barré syndrome from 1 December.

21 January 2016: Brazil reports 3,893 suspected cases of microcephaly, including 49 deaths. Of these, 3,381 are under investigation. In six cases, Zika virus was detected in samples from newborns or stillbirths.

22 January 2016: Brazil reports that 1,708 cases of Guillain-Barré syndrome have been registered by hospitals between January and November 2015. Most states reporting cases are experiencing simultaneous outbreaks of Zika, chikungunya, and dengue. The potential cause of the upsurge in this syndrome cannot be established.

23 January 2016: The Dominican Republic reports its first 10 PCR confirmed cases of Zika infection, of which 8 were locally acquired and 2 were imported from El Salvador.

25 January 2016: France reports two confirmed cases of Guillain-Barré syndrome in Martinique. Both cases require admission to an intensive care unit. One patient tests positive for Zika virus infection.

25 January 2016: The United States reports the first PCR confirmed case of locally acquired Zika infection in St. Croix, one of the three main islands in the United States Virgin Islands.

27 January 2016: Nicaragua reports its first two PCR confirmed cases of locally acquired Zika infection.

27 January 2016: French Polynesia reports retrospective data on its Zika outbreak, which coincided with a dengue outbreak. From 7 October 2013 to 6 April 2015, 8,750 suspected cases of Zika were reported, with 383 PCR confirmed cases and an estimated 32,000 clinical consultations (11.5 percent of the total population). The outbreak ended in April 2014.

28 January 2016: Curacao reports its first PCR confirmed case of locally acquired Zika.

29 January 2016: Suriname reports 1,107 suspected cases of Zika, of which 308 are confirmed, by PCR, for Zika virus.

30 January 2016: Jamaica reports its first PCR confirmed case of locally acquired Zika.

1 February 2016: WHO declares that the recent association of Zika infection with clusters of microcephaly and other neurological disorders constitutes a Public Health Emergency of International Concern.

1 February 2016: Cabo Verde reports 7,081 suspected cases of Zika between end September 2015 and 17 January 2016. The number of cases peaked at the end of November and began to decline. Though the reporting of cases of microcephaly is mandatory, no neurological complications are detected.

2 February 2016: Chile reports its first three PCR confirmed cases of Zika virus on the mainland in **travelers returning from Colombia**, Venezuela, and Brazil.

2 February 2016: The United States reports a case of sexual transmission of Zika infection in Texas. One patient developed symptoms of illness after returning from Venezuela. The second patient had not recently travelled outside of the United States, but subsequently developed symptoms after sexual contact with the traveler. This is the third indication that the virus can be sexually transmitted, which appears to be a rare event. [44](#)

4 February 2016: Brazilian health officials confirm a case of Zika virus infection transmitted by transfused blood from an infected donor.

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ANNEX VII. DISCLOSURE OF ANY CONFLICT OF INTEREST

GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT PROJECT

USAID NON-DISCLOSURE AND CONFLICTS AGREEMENT

USAID Non-Disclosure and Conflicts Agreement- Global Health Program Cycle Improvement Project

As used in this Agreement, Sensitive Data is marked or unmarked, oral, written or in any other form, "sensitive but unclassified information," procurement sensitive and source selection information, and information such as medical, personnel, financial, investigatory, visa, law enforcement, or other information which, if released, could result in harm or unfair treatment to an individual or group, or could have a negative impact upon foreign policy or relations, or USAID's mission.

Intending to be legally bound, I hereby accept the obligations contained in this Agreement in consideration of my being granted access to Sensitive Data, and specifically I understand and acknowledge that:

1. I have been given access to USAID Sensitive Data to facilitate the performance of duties assigned to me for compensation, monetary or otherwise. By being granted access to such Sensitive Data, special confidence and trust has been placed in me by the United States Government, and as such it is my responsibility to safeguard Sensitive Data disclosed to me, and to refrain from disclosing Sensitive Data to persons not requiring access for performance of official USAID duties.
2. Before disclosing Sensitive Data, I must determine the recipient's "need to know" or "need to access" Sensitive Data for USAID purposes.
3. I agree to abide in all respects by 41, U.S.C. 2101 - 2107, The Procurement Integrity Act, and specifically agree not to disclose source selection information or contractor bid proposal information to any person or entity not authorized by agency regulations to receive such information.
4. I have reviewed my employment (past, present and under consideration) and financial interests, as well as those of my household family members, and certify that, to the best of my knowledge and belief, I have no actual or potential conflict of interest that could diminish my capacity to perform my assigned duties in an impartial and objective manner.
5. Any breach of this Agreement may result in the termination of my access to Sensitive Data, which, if such termination effectively negates my ability to perform my assigned duties, may lead to the termination of my employment or other relationships with the Departments or Agencies that granted my access.
6. I will not use Sensitive Data, while working at USAID or thereafter, for personal gain or detrimentally to USAID, or disclose or make available all or any part of the Sensitive Data to any person, firm, corporation, association, or any other entity for any reason or purpose whatsoever, directly or indirectly, except as may be required for the benefit USAID.
7. Misuse of government Sensitive Data could constitute a violation, or violations, of United States criminal law, and Federally-affiliated workers (including some contract employees) who violate privacy safeguards may be subject to disciplinary actions, a fine of up to \$5,000, or both. In particular, U.S. criminal law (18 USC § 1905) protects confidential information from unauthorized disclosure by government employees. There is also an exemption from the Freedom of Information Act (FOIA) protecting such information from disclosure to the public. Finally, the ethical standards that bind each government employee also prohibit unauthorized disclosure (5 CFR 2635.703).
8. All Sensitive Data to which I have access or may obtain access by signing this Agreement is now and will remain the property of, or under the control of, the United States Government. I agree that I must return all Sensitive Data which has or may come into my possession (a) upon demand by an authorized representative of the United States Government; (b) upon the conclusion of my employment or other relationship with the Department or Agency that last granted me access to

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Sensitive Data; or (c) upon the conclusion of my employment or other relationship that requires access to Sensitive Data.

9. Notwithstanding the foregoing, I shall not be restricted from disclosing or using Sensitive Data that: (i) is or becomes generally available to the public other than as a result of an unauthorized disclosure by me; (ii) becomes available to me in a manner that is not in contravention of applicable law; or (iii) is required to be disclosed by law, court order, or other legal process.

ACCEPTANCE

The undersigned accepts the terms and conditions of this Agreement.

Signature		Date	05/18/2018
Name	Constance A Carrino	Title	Consultant


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ACCEPTANCE

The undersigned accepts the terms and conditions of this Agreement.

	29 April 2018
Signature	Date
Alessandra Noriega Minichiello	29 April 2018
Name	Title

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ACCEPTANCE

The undersigned accepts the terms and conditions of this Agreement.

<u>Alba Amaya B.</u>	<u>05/17/2018</u>
Signature	Date
<u>ALBA P. AMAYA-BURNS</u>	<u>M.D., MSc.</u>
Name	Title

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9. Notwithstanding the foregoing, I shall not be restricted from disclosing or using Sensitive Data that: (i) is or becomes generally available to the public other than as a result of an unauthorized disclosure by me; (ii) becomes available to me in a manner that is not in contravention of applicable law; or (iii) is required to be disclosed by law, court order, or other legal process.

ACCEPTANCE

The undersigned accepts the terms and conditions of this Agreement.

Signature

Lindsay I Harnish

Date

10/01/2018

Name

Lindsay Harnish

Title

Consultant

ANNEX VIII. SUMMARY BIOS OF EVALUATION TEAM

Constance A. Carrino, PhD, Evaluation Team Leader and Organizational Development Expert, led all aspects of the evaluation, including the conduct of field visits, interviewing, and writing. With cooperation from the entire team, she focused on Evaluation Questions 4 and 5 that relate to the approach and structure of the Zika response, and traveled to the Dominican Republic, Guatemala, and Paraguay for this evaluation.

Dr. Carrino is an experienced manager, innovator, and policy advisor in international health and foreign aid who provides advice to organizations designing, evaluating, and improving foreign assistance policies and programs. She is a former senior executive for USAID (e.g., director, Bureau for Global Health's Office of HIV/AIDS) and represented USAID as deputy principal for the President's Emergency Plan for AIDS Relief (PEPFAR); U.S. Embassy to Japan's Counselor for International Development; and director, social sector restructuring, USAID/Russia and co-chair of U.S.-Russia Maternal and Child Health Subcommittee. Dr. Carrino holds a PhD in Economics from George Washington University, a recent MSc in National Security Policy from the National War College, and an MA in International Studies from American University.

Alessandra (Shanthi) Noriega Minichiello, MPH, Evaluation Specialist, led the development of data collection and analysis tools, in consultation with the rest of the team. She led discussions on the evaluation design and implementation, and provided technical direction into defining the objectives and process. She participated in all aspects of the evaluation, including planning, data collection and analysis, development of evaluation presentations, and report writing. She traveled to the Dominican Republic and Paraguay for this evaluation.

Ms. Noriega Minichiello, presently executive director of Solve Consultants, brings two decades of field experience on monitoring, evaluation, and operational research related to HIV and neglected tropical diseases. She is an experienced manager and researcher who has worked with leading development companies, such as Research Triangle Institute, Population Services International, and FHI 360, as well as WHO's Health Metrics Network. Presently completing an MBA at the Imperial College, London, Ms. Noriega Minichiello holds a post-graduate diploma in epidemiology from London School of Hygiene and Tropical Medicine and an MPH from Boston University.

Alba Amaya-Burns, MD, MSc, Infectious Disease Advisor, served as a subject matter expert for the evaluation and provided technical expertise in the area of infectious disease prevention, detection, and response. She provided technical input on all aspects of the Zika response, including vector control, SBCC, maternal and child health, and community mobilization, and traveled to Colombia, Guatemala, and Jamaica for this evaluation.

Dr. Amaya-Burns is an experienced educator and public health leader specializing in global health and tropical medicine including health disparities, chronic and infectious diseases, maternal health, and bioethics for global health research. She has trained public health professionals and global health graduate students in Latin America, the United States, and China. She worked as associate professor of the practice at Duke University and associate professor at Duke Kunshan University. Currently she works as adjunct associate professor of global health at Duke University's campus in China, Duke Kunshan University. She has also served in different technical advisor groups for WHO and United Nations

(International Organization for Migration). Dr. Amaya-Burns received her MD from Universidad Nacional de Nicaragua and earned her MSc in Clinical Tropical Medicine from London School of Hygiene and Tropical Medicine, London University.

Lindsay Harnish, MA, Rapid Response Advisor, provided input during the planning, data collection, and data interpretation stages on the differences between development and emergency response. She provided input to the data collection tool development and recommendations around issues related to the need and execution of rapid response to disease outbreaks, and supported Dr. Carrino as team lead. She traveled to Colombia, Guatemala, and Jamaica for this evaluation.

Ms. Harnish, presently the regional technical advisor for Project Concern International, has extensive experience managing and leading USAID performance evaluations as well as in-country experience in rapid response to Ebola in West Africa. Working for NGOs such as Project Concern, Vital Voices, and ACIDI VOCA, she has worked on key health emergencies, including supporting the Ebola virus disease response in Liberia and earthquake response and recovery in Chile, as well as managing an HIV education program for orphans and vulnerable children in Uganda. Ms. Harnish holds an MA in international development with emphasis on public health from American University.

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