



**USAID**  
FROM THE AMERICAN PEOPLE

**K4Health**  
Knowledge for Health

# LEARNING FROM ZIKA

A synthesis of lessons learned for  
future public health emergencies

# USAID ZIKA PARTNERS



\*Work was performed at the beginning of the response and predated policy changes.

## USAID ZIKA RESPONSE COUNTRIES



### Latin America:

Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Paraguay, and Peru

### Caribbean:

Antigua and Barbuda, the Bahamas, Barbados, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago



From 2015–2018, the Pan American Health Organization reported

**583,451** suspected and **223,477** confirmed

cases of Zika in the Americas.<sup>[1]</sup>

[1] Zika cumulative cases. PLISA Health Information Platform for the Americas. Pan American Health Organization website. <http://www.paho.org/data/index.php/en/mnu-topics/zika.html>. Accessed August 14, 2019.

# INSIGHTS AT-A-GLANCE

**Involve communities from the beginning** and support local groups to mobilize and undertake activities in their communities.

**Create and implement a standard social and behavior change strategy** among partners, including the prioritization of which prevention behaviors to promote.

**Focus on families** by strengthening and measuring the quality of services and support they receive during and after the response.



# INTRODUCTION

The Zika outbreak in Latin America and the Caribbean was sudden, unexpected, and left a lasting public health impact that continues to affect families and communities. Zika is a communicable disease primarily transmitted through the *Aedes aegypti* mosquito. The virus can also be transmitted sexually and from a pregnant mother to her child during pregnancy. Contracting Zika during pregnancy can lead to congenital Zika syndrome, including microcephaly—which can cause potentially devastating physical and mental developmental consequences. Zika was formally declared a Public Health Emergency of International Concern by the World Health Organization (WHO) in February 2016, following an increase in cases in Brazil. That April, the United States Agency for International Development (USAID) began its Zika prevention efforts in Latin American and the Caribbean. In November of the same year (2016), WHO confirmed that Zika would require a long-term approach, lifting the emergency declaration.

USAID convened more than 20 partners to address issues pertaining to four primary levels of effort including vector control, social and behavior change (SBC), community engagement, and service delivery. The agency stated as its goal: To support and strengthen systems for priority countries in their Zika response efforts in order to minimize negative pregnancy outcomes. The resulting activities from 2016 to 2019 generated important lessons learned and demonstrated effective practices that can serve to inform and strengthen future responses to public health emergencies—including those unrelated to Zika. Additional USAID activities, such as Combating Zika and Future Threats: A Grand Challenge for Development and an interagency agreement with the U.S. Centers for Disease Control and Prevention, supported research and innovation in Zika prevention.

This report synthesizes high-level **lessons learned** and **effective practices** from USAID's Zika response, drawn from collective experiences expressed by implementing partners.

In total, the report highlights 17 insights, the majority of which are grouped by theme. This is intended to be a practical document that can be quickly and succinctly reviewed to inform the design and implementation of future emergency responses. It is not a rigorous or exhaustive review of all Zika partner activities.

**Lessons learned** include key takeaways or knowledge from an experience. A lesson learned can be insights on what made an activity successful or recommendations for what should be done differently next time.

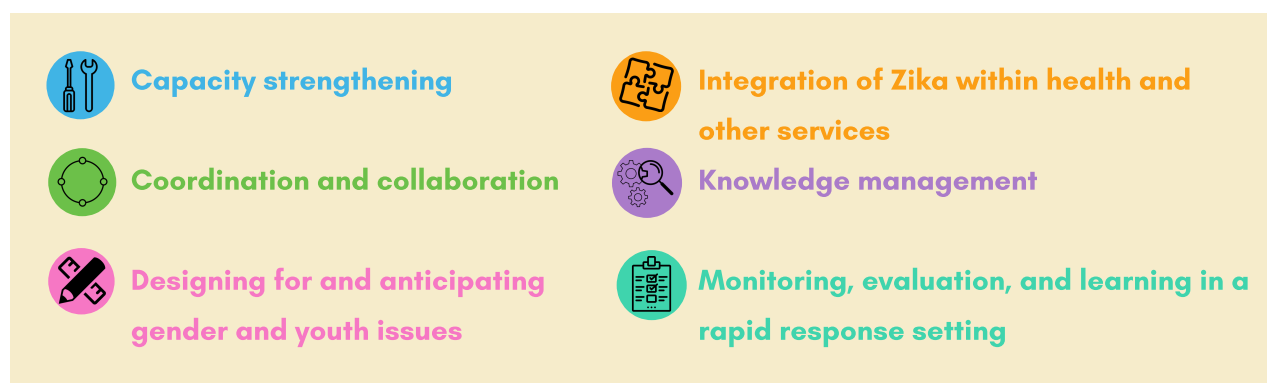
**Effective practices** are approaches or strategies that are *proven* to be successful, based on supporting data, or that are *known* to be successful at meeting their goals, based on partner experience.

# APPROACH

To inform this synthesis, the K4Health Zika team reviewed 91 documents from implementing partners. Our review included project briefs, work plans, annual reports, meeting notes, blog posts, PowerPoint presentations, and videos. We sorted highlights from each document based on a set of predetermined categories: activities implemented, achievements, challenges, collaborations, and recommendations identified by the authors. We then reviewed each category for recurring themes.

These themes were vetted by USAID and Zika partners during a three-day Share Fair—Building Consensus and Capturing Lessons Learned: Learning from the Zika Response for Future Success—hosted by K4Health in April 2019 in the Dominican Republic. The event brought together 75 participants representing 18 partner organizations and projects from 14 countries in Latin America and the Caribbean. Its purpose was to generate consensus around the design, implementation, and utility of effective practices and lessons learned from USAID's Zika response to inform future outbreaks.

Based on the document review, partner insights from the April 2019 event, and further discussions with partners at regional and working group meetings, key insights emerged across several cross-cutting themes:



The following two evidence-based research assessments served as key resources for our synthesis:

- *Performance Evaluation of USAID's Zika Response in Latin America and the Caribbean (LAC) Region*. This assessment, conducted by the Global Health Program Cycle Improvement Project (GH Pro), highlights findings from a mixed-methods assessment that documents enablers, limitations, and achievements from the Zika response.<sup>[2]</sup>
- *Lessons Learned for SBC Programming from the USAID Zika Response* [publication expected fall 2019]. This assessment conducted by Breakthrough RESEARCH documents lessons learned from the SBC line of effort, with a focus on planning, implementation, and evidence-generation efforts from USAID's Zika response.<sup>[3]</sup>

[2] Carrino, C., Noriega Minichiello, A., Amaya-Burns, A., & Harnish, L. (2019). *Performance Evaluation of USAID's Zika Response in the Latin America and Caribbean (LAC) Region*. Washington, D.C.: Global Health Program Cycle Improvement Project.

[3] Silva, M., Fleckman, J., Stollow, J., & Lesar, K. (2019). *Lessons Learned for SBC Programming from the USAID Zika Response*. Research Report. Washington, D.C.: Population Council, Breakthrough RESEARCH.



# INSIGHTS



As you read the following insights, please note: Each insight statement is supported by illustrative examples of activities from USAID's Zika response. These examples are included to give the reader context, not to provide a comprehensive list of all implemented activities relevant to that insight.

## **Involve communities from the beginning and support local groups to mobilize and undertake activities in their communities.**

Community groups bring local expertise, networks, and social capital; they are critical allies in an early response strategy and throughout a response. During the Zika response, partners found that community organizations were well-positioned to consider cultural norms and address misinformation and stigma. Partners such as Community Action on Zika (CAZ) and Global Communities, for example, leveraged community volunteers to implement vector control activities and conduct mosquito surveillance, and the International Federation of Red Cross and Red Crescent Societies (IFRC) organized community cleanups and fairs for vector control. Partners also noted the importance of understanding a community's most pressing concerns to ensure messages would resonate. IFRC incorporated dengue and chikungunya into their Zika messaging for this reason, as these diseases were more top of mind and perceived as a larger threat among community members. Additionally, IFRC worked with community volunteers to track and address rumors regarding Zika transmission and prevention in communities.



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## **Create and implement a standard social and behavior change strategy among partners, including the prioritization of which prevention behaviors to promote.**

At the start of the response, implementing partners promoted more than 30 prevention behaviors, which diluted the effectiveness of SBC efforts. In an effort to harmonize SBC messaging for improved behavioral outcomes, USAID, Breakthrough ACTION, and Breakthrough RESEARCH led the development of the *Zika Prevention Behavior Matrix* and the *Technical Specifications Content Guide* with support from implementing partners. These two resources highlight seven Zika prevention behaviors—and the technical requirements to implement each behavior—that have the greatest potential to reduce Zika transmission and minimize negative pregnancy outcomes. Each behavior was assessed based on three categories: (1) efficacy, (2) potential to reduce transmission at the population level, and (3) ease to perform the behavior. These documents were considered key components of the response, and many partners suggested creating these resources earlier in future responses. (This process was undertaken in the second year of the three-year response.)

## **Focus on families by strengthening and measuring the quality of services and support they receive during and after the response.**

All children have a fundamental right to high-quality health services. Children with congenital Zika syndrome, including microcephaly, are affected for life. Many partners noted that continuing care and support, while perhaps not typically considered part of an emergency response, was an important part of assistance to Zika-affected communities and families. Implementing partners whose work focused on care and support, such as UNICEF and the USAID Applying Science to Strengthen and Improve Systems Project (ASSIST) Project, worked to ensure families affected by congenital Zika syndrome received high-quality, evidence-based care and referrals for continued care, and that they were linked to community services and support. For example, UNICEF's 1,000 Days of Love campaign focused on strengthening early intervention strategies for young children affected by Zika and other congenital malformations. Partners also provided families with key early childhood stimulation activities, which could be conducted in the home to help children with long-term Zika-related disabilities develop to their full potential. ASSIST worked to improve providers' capacity to deliver high-quality Zika-related health care and social services, developed quality of care indicators, and created counseling guides.



## Capacity Strengthening

*The following practices and approaches focus on strengthening or building skills and increasing knowledge related to Zika among local partners, government ministries, and within Zika partner organizations.*

### **Conduct needs assessments to understand pressing capacity needs and knowledge gaps.**

Partners emphasized the importance of taking time to conduct a needs assessment at the beginning of the response. The format of these assessments varied—partners conducted surveys, field observations, focus groups, and in-person meetings—and included various types of stakeholders. Based on needs assessment findings, ASSIST trained service providers on screening protocols and prenatal care, and the Zika AIRS Project (ZAP) trained vector control technicians in larviciding techniques. Needs assessments helped USAID implementing partners identify not only the needs of community members and health care providers, but also responders and the partners themselves. For example, Breakthrough ACTION provided capacity strengthening activities to host governments and other USAID Zika partners to design, implement, and evaluate high-quality, evidence-based SBC interventions.

### **Use both in-person and virtual strategies to address workplace barriers, such as remote locations or limited staffing, that can hinder efforts to strengthen the capacity of service providers.**

Partners used technology and innovative strategies to train providers working in remote settings, and in the case of facilities with limited staff, to make it possible for personnel to access Zika trainings without creating additional burdens by removing them from their work. For example, the Maternal and Child Survival Program (MCSP) conducted training-of-trainers and cascade trainings to reach a broader population of service providers located across the Caribbean region. ASSIST implemented the Extension for Community Health Care Outcomes (ECHO) model—leveraging a video conferencing software—to increase pediatric clinician knowledge, comfort, and competence in providing care to children and their families affected by Zika. Through the platform, regional technical teams and specialists from the American Association of Pediatrics held trainings and remotely mentored local service providers.





## Coordination and Collaboration

*The following practices and approaches encourage coordination and collaboration between Zika partners, the public health sector, and other sectors at all levels—community, regional, and national.*

### **Coordinate with government sectors at all levels and tailor strategies to local context to support commitment and capacity.**

While national ministries of health are essential partners in any response, partners noted that coordination strategies should be adapted to align with government structures. For example, in decentralized systems, partners found it effective to coordinate more frequently with local government leaders, such as mayors and subnational health facility staff, because they were well connected in the community, actively engaged, and motivated by a desire to build skills and capacity. At the local level, for instance, CAZ partnered with community leaders, local authorities, local health services, schools, and community organizations to facilitate community engagement activities in hundreds of communities across five affected countries. Partners working within centralized systems found that it was easier to expand activities through national-level officials, because they had preexisting networks at the local level. ZAP, for example, partnered with national authorities in several ways, including offering practical trainings to strengthen the capacity and skills of ministries of health in vector control and entomology.

### **Facilitate regular meetings between implementing partners and other stakeholders to ensure coordination is strategic and continuous.**

Partners noted that coordination, collaboration, and knowledge sharing among implementing partners was a key component of success for the response at all levels. With USAID's encouragement, implementing partners coordinated their response efforts in various ways, including both working group meetings and in-person regional meetings. According to the Breakthrough RESEARCH assessment, working groups established by USAID were the primary avenues for implementing partners to collaborate and coordinate different aspects of the response at both the headquarters and country levels. Meanwhile, the GH Pro report found that participatory country planning and regional meetings that included government counterparts contributed to programmatic alignment and useful information-sharing. For implementing partners and governments, regional meetings were seen as particularly useful to move along policies and approaches. Other partners noted that in-person meetings and share fairs provided networking opportunities that strengthened the Zika response.



## Designing For and Anticipating Gender and Youth Issues

*The following practices and approaches consider gender-specific and youth-specific needs in the design phase and throughout the response.*

### **Encourage male involvement in prevention efforts and consider the impact of gender and social norms on program implementation.**

Given Zika's potentially devastating effects on pregnancy outcomes, the beginning of USAID's Zika response focused primarily on Zika prevention among pregnant women and women of reproductive age. However, partners soon realized that several of the Zika prevention behaviors—specifically condom use during pregnancy and responsibility for conducting vector control measures in the home—were deeply influenced by gender and social norms. For example, it can be difficult for women in a committed relationship to negotiate condom use, and it is even more difficult if a woman is already pregnant. As a result, many partners began tailoring SBC messages to men and promoting male engagement in antenatal care visits, among other activities. Other partners, such as ASSIST and Breakthrough ACTION, implemented research studies to understand the role of gender in regard to Zika prevention behaviors to inform programming. Partners also cited the importance of incorporating gender considerations in the implementation of program activities. For example, to mitigate the potential for sexual violence against female health workers or volunteers when conducting home visits, partners ultimately conducted home visits in pairs of one woman and one man. Partners also facilitated gender awareness trainings among staff. For example, CAZ trained staff members on gender-related issues specific to Zika.

### **Engage youth as agents of change through online, creative, continuous, and fun interventions.**

Zika partners emphasized the importance of engaging with and educating youth on Zika prevention and risk communication, highlighting their potential role as agents of change in their households and communities. For example, Population Services International/Pan American Social Marketing Organization (PSI/PASMO) administered counseling services to thousands of teens, provided electronic vouchers to attend health clinics via Facebook, and trained teachers to provide Zika information. Other partners hosted youth summer camps, used puppets for Zika education, and strengthened the capacity of youth leaders. CARE, IFRC, and CAZ also developed games to discuss Zika prevention with youth. Outside of schools, partners used online platforms that allowed for rapid engagement, such as WhatsApp and Facebook, to connect with youth about sexual and reproductive health issues, including Zika.



## Integration of Zika Within Health and Other Services

*The following practices and approaches integrate Zika into other services—such as routine family planning and antenatal care visits—or create mechanisms for referral systems, continued care, and psychosocial support, among other areas.*

### **Map and leverage existing systems, knowledge, and networks to avoid parallel structures.**

Partners leveraged existing networks to share information on Zika, promote Zika prevention behaviors, and strengthen partnerships. For example, PSI/PASMO worked with an existing private medical doctor network to connect health care providers with key information related to Zika risk and prevention. UNICEF and ASSIST strengthened quality of care by seeking out programs to link communities and affected families with existing services. Partners leveraged past experiences with dengue and chikungunya to respond to Zika when new evidence was emerging. The response also leveraged the experience of several partners who had strong ties to the region and in-depth knowledge regarding emergency response efforts. The external GH Pro report also found that working with existing country-level multisectoral emergency task forces supported integration of Zika, coordination, and the reduction of duplication of efforts.

### **Integrate outbreak response into broader health and community sectors to encourage sustainability and efficiency.**

Integrating emergency activities with broader services and sectors can strengthen health systems by creating referral systems, providing comprehensive care, and linking communities to services. Zika partners worked with stakeholders in other health areas to broaden the reach of prevention efforts. For example, PSI/PASMO trained and worked with private pharmacists to equip them with essential information to provide to their customers. Integration can also include the revision of tools from other sectors—including job aids, protocols, and referral pathways—to include Zika. MCSP adapted existing family planning counseling materials and guidance documents to integrate Zika within family planning services, and vector control partners integrated Zika into existing arbovirus programs and messages. Other partners worked with maternal, newborn, and child health, continuing care, and disability services and some worked with partners beyond the health sector. For example, vector control and education sectors collaborated to incorporate messages about Zika into national education curricula.



# Knowledge Management

*The following practices and approaches are for helping responders find, use, share, and adapt critical information.*

## **Include knowledge management from the start, and at various levels within the response.**

USAID and the USAID Zika implementing partners had numerous mechanisms in place to share technical and programmatic information, best practices, and research findings in a timely manner—within their own organizations, with other USAID partners, and between partners and government counterparts. Despite the need for speed, partners consistently valued dedicated time to exchange knowledge, such as group phone calls, share fairs, and working group and regional meetings. Partners cited these conversations as critical to success because they strengthened open communication and working relationships. Partners noted, for example, that through working group calls and meetings, responders were better able to access and understand emerging data and consider how to adapt to the results. For example, Breakthrough ACTION coordinated SBC working groups for implementing partners in-country and for implementing partners in Washington, D.C. In addition, the Zika Partners website, managed by K4Health, was a private space for communication between USAID's Zika team and partners. Partners used the website to submit and access monthly progress reports, monitoring and evaluation data, meeting agendas and presentations, event photos, current and past research activities, and contact information for individuals working on USAID's Zika response. An external performance evaluation of USAID's Zika response by GH Pro found that in-country partner meetings organized by USAID Zika advisors, regional meetings, and the internal Zika Partners website all helped with information-sharing, reduced duplication, and served as tools for important documentation.

## **Provide common knowledge sharing platforms for partners to search for and share information, especially during the response design phase.**

Partners used common platforms for sharing information within their own organizations and projects, with ministry and local officials, and between implementing partners. K4Health and the Health Communication Capacity Collaborative (HC3) created the public Zika Communication Network (ZCN) website, adapted from the Ebola Communication Network, created by HC3. K4Health collaborated with partners to publish more than 600 tools, resources, and guidance documents created during the Zika response on the ZCN website. Users can search for resources by language, country, topic, type, and source—making it the one-stop shop for Zika prevention and preparedness materials. The willingness of partners



to collaborate and share essential knowledge externally was key to the success of the ZCN and the Zika response. Other free and low-cost knowledge sharing platforms used by partners were WhatsApp and Dropbox. In Honduras, for example, CAZ created a WhatsApp group to share weekly updates and news with country team members and partners. Several Zika partners, including MCSP and PSI/PASMO, used mPowering's ORB library to contribute Zika resources for service providers.

### **Adapt existing materials and trainings to meet emerging needs.**

Several countries had existing prevention, communication, and health materials on chikungunya, dengue, and family planning that partners adapted to meet the needs of the Zika response. This adaptation included SBC and community engagement materials as well as technical content including protocols and reference documents for service providers. Time is a valuable resource during an emergency response and adapting existing materials decreased the amount of time required to produce materials for communities, policy makers, and other stakeholders. The use of adapted materials also helped to ensure that Zika messaging was integrated into existing systems and services—such as family planning consultations—including health, education, and surveillance systems. Partners cautioned that tools and guidance should be thoughtfully adapted and critically reviewed to ensure they meet the specific needs of an emergency. For example, adapting chikungunya and dengue materials saved time, but it also introduced challenges: Zika affects unborn children in ways that chikungunya and dengue do not, and adapted materials needed to be revised to not only include prevention behaviors specific to Zika, but also address differences in risk perception for expectant mothers and babies.



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# Monitoring, Evaluation, and Learning in a Rapid Response Setting

*The following practices and approaches are for collecting and evaluating data and engaging in continuous learning in a rapid response setting.*

## **Prioritize the development and implementation of a standard framework to guide monitoring, evaluation, and learning across partners and countries at the beginning of the response.**

Future response efforts should include a unified measurement framework developed at the beginning to ensure consistency in data collection instruments and allow for comparison across partners and countries, as noted in the Breakthrough RESEARCH assessment. Indicators should be carefully developed to ensure they not only demonstrate progress but contribute key information for timely program improvement. Despite the need for consistent data collection instruments, partners in the Zika response cautioned against aggregating data from different contexts to avoid misinterpretation. The Breakthrough RESEARCH assessment recommends identifying a dedicated technical partner at the beginning of the response to support the development of the framework and provide technical assistance to partners.

## **Use flexible, real-time monitoring platforms for rapid program adaptation.**

Partners used several modern data collection tools to allow for real-time monitoring and program adaptation. For example, the Zika case management tool (ZicaMas), developed by ASSIST, supported health care providers to identify and track affected children and families to provide timely care. Others switched from paper-based forms to mobile phones for rapid data collection, and some partners including Medical Care Development International, used ArcGIS software to map communities and target populations.

## **Conduct rapid formative research to inform program design and nurture a culture of sharing research among partners and communities.**

Response efforts should build in time to conduct rapid formative research and baseline assessments at the beginning of the response. Although it can be difficult due to time constraints in a rapid response, partners interviewed for the Breakthrough RESEARCH

assessment recommended dedicating ample time to use the findings from formative research to inform initial program design. Both qualitative and quantitative data proved valuable during the response; for example, qualitative data allowed partners to understand the psychosocial factors that needed to be addressed in programs. For data to be used to its full potential, a culture of sharing should be nurtured through a top-down approach at the beginning of the response. Internal platforms among partners—such as the Zika Partners website and working group meetings—can serve to share unpublished data for timely decisionmaking. Finally, data and lessons learned should be shared with communities to strengthen trust and self-resilience.

## CONCLUSION

We encourage those tasked with responding to future outbreaks to consider these effective practices and lessons learned, and adapt them to fit the context and strengthen future responses. We also urge responders to synthesize and share essential cross-cutting effective practices and lessons learned from other response efforts. Learning from one another's experiences will strengthen our global efforts and enable us to better respond to families, communities, and countries during an emergency.



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