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A light blue world map is visible in the background of the right-hand section of the cover.

# ZIKA VIRUS OUTBREAK GLOBAL RESPONSE

Interim report | May 2016

# About this report

This is an interim report on the WHO-led global response to the emerging threat posed by Zika virus. It summarises the background to the Strategic Response Framework and Joint Operations Plan published in February 2016, provides an update on some key activities conducted by WHO and its partners since, and sets out the current funding gap for critical activities until the end of June 2016, as well as the approach to setting a new strategy from July 2016 onwards.



An employee at an auto yard in Baranquilla, Colombia, checks for mosquito larvae in standing water that has accumulated in tyres. In the past, employees at the yard have come down with dengue and chikungunya viruses, which are spread by the same *Aedes Aegypti* mosquito as is Zika virus.

Photo credit | Joshua E Cogan

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## Background

Zika virus is an emerging viral disease that is transmitted through the bite of an infected mosquito, primarily *Aedes aegypti*, the same vector that transmits chikungunya, dengue and yellow fever. Zika has a similar epidemiology, clinical presentation and transmission cycle in urban environments as chikungunya and dengue, although it generally causes milder illness.

Zika virus was first identified in 1947 in a monkey in the Zika forest of Uganda, and was first isolated in humans in 1952 in Uganda and the United Republic of Tanzania. Zika virus has been causing sporadic disease in Africa and Asia. Outbreaks were reported for the first time from the Pacific in 2007 and 2013 in Yap Island (Federated States of Micronesia) and French Polynesia, respectively. There was subsequent spread of the virus to other Pacific islands, including Cook Islands, Easter Island (Chile), Fiji, New Caledonia, Samoa, Solomon Islands and Vanuatu. The geographical range of Zika virus has been steadily increasing ever since.

In February 2015, Brazil detected cases of fever and rash that were confirmed to be Zika virus in May 2015. The last official report dated 1 December 2015, indicated 56 318 suspected cases of Zika virus disease in 29 States, with localized transmission occurring since April 2015. Due to the magnitude of the outbreak, Brazil has stopped counting cases of Zika virus. Today the Brazilian national authorities estimate 500 000 to 1 500 000 cases of Zika virus disease. In October 2015, both Colombia and Cabo Verde, off the coast of Africa, reported their first outbreaks of the virus. As of 19 March 2016, Colombia had reported 56 477 suspected cases of Zika virus, while Cabo Verde reported 7499 suspected cases as of 6 March 2016.

An International Health Regulations (IHR 2005) Emergency Committee met on 1 February 2016, and WHO declared the recent clusters of microcephaly and other neurological disorders in Brazil, following a similar cluster in French Polynesia in 2014, constitutes a Public Health Emergency of International Concern. In the absence of another explanation for the clusters of microcephaly and other neurological disorders, the IHR Emergency Committee recommended enhanced surveillance and research, and aggressive measures to reduce infection with Zika virus, particularly amongst pregnant women and women of childbearing age.

## The Strategic Response Framework and Joint Operations Plan

On 14 February 2016, WHO launched a global Strategic Response Framework and Joint Operations Plan to guide the international response to the cluster of congenital malformations (microcephaly) and other neurological complications (Guillain-Barré syndrome or GBS) that appeared to be linked to Zika virus infection. The strategy focuses on mobilizing and coordinating partners to assist affected and at-risk countries across three core areas: surveillance, response and research.

WHO's Regional Office for the Americas (AMRO)/Pan American Health Organization (PAHO) has been working closely with affected countries in the Americas since mid-2015 to investigate and respond to the outbreak. AMRO/PAHO has mobilized staff and members of the Global Outbreak Alert and Response Network (GOARN) to assist Ministries of Health in strengthening detection of Zika virus through rapid reporting and laboratory testing. A GOARN international team visited health authorities in Brazil to help assess the unprecedented increase in microcephaly cases and their possible association with Zika virus infection, as well as to provide recommendations to the Ministry of Health for surveillance, disease control measures and epidemiological research. WHO has published 16 guidance [documents](http://www.who.int/csr/resources/publications/zika/en/) (<http://www.who.int/csr/resources/publications/zika/en/>) covering all aspects of the response translated into relevant languages.

As of 18 May 2016, 60 countries and territories have reported continuing mosquito-borne transmission of Zika virus—primarily in South and Central America; many of these countries and territories also reported increasing numbers of microcephaly cases, Guillain-Barré syndrome, and other neurological

complications. 46 countries are experiencing a first Zika virus outbreak since 2015. It is hard to predict where the virus will go next. The *Aedes aegypti* mosquito that carries the virus has habitats in parts of southern Europe, Africa and the southern United States; and other *Aedes* species, including those active in temperate latitudes, could also become more active vectors.

The global response to Zika is coordinated from WHO headquarters in Geneva. The agency has activated an Incident Management System (IMS) in its headquarters and regional offices as part of its new programme for outbreaks and health emergencies. The system enables a dedicated incident manager based at WHO headquarters to draw on expertise and resources from across the entire Organization.

PAHO and WHO's operational response began long before the declaration of the Zika outbreak as a Public Health Emergency of International Concern and has accelerated since. In addition to expert fact-finding and advisory missions to affected countries, including most recently to Cabo Verde, WHO has established an Emergency 4Ws Portal on its website to provide a central point of reference for partners showing in real time who is doing what, where, and when, at the global, regional, and national level. The 4Ws portal has already had an impact; more than 500 partner activities and associated budgets are now being tracked through the tool, helping to ensure that effort is directed where it is most needed, duplications and deficits are minimised, and the cost-effectiveness of activities is boosted accordingly.

Based on research to date, there is scientific consensus that Zika virus is a cause of microcephaly and Guillain-Barré syndrome.

## Progress and funding gaps in the response

Significant funding gaps exist for the full implementation of the Strategic Response Framework and Joint Operations Plan by WHO and its partners. This interim report highlights important work carried out so far, outlines the main priority funding needs, and explains how a new strategy will be developed to meet the challenge posed by this emerging threat.

In February 2016, 23 partners were identified as working with WHO to implement the Strategic Response Framework published in February 2016. This number has now increased to over 50. The following activities, which are not exhaustive, have been undertaken by WHO and some partner organizations. These examples serve to illustrate the depth and breadth of work being conducted globally despite a significant gap between the funding requested and the funding received, and reflect the addition of new partners to the collaboration against Zika.

Since the initial Joint Operations Plan was published, the total amount of funding being requested by WHO and partners for activities over the first six month period to July 2016 has increased from the initial US\$ 56 million. WHO's Contingency Fund for Emergencies, established in May 2015, has rapidly released US\$ 3.8 million to implement the initial stages of the response.

Whilst the amount of funding secured has fallen far short of this request, funding requirements have been re-prioritized and an amount for 'essential activities' has been determined to ensure the limited available funding goes where it is most needed. New funding figures will be included in the revised global strategy, but where current gaps and essential requirements are known, they are indicated below.

### Panel 1 | Partners contributing to the Zika emergency 4Ws portal

AmeriCares  
 Australasian Society for Infectious Diseases  
 Australian Cerebral Palsy Alliance  
 Child Fund International  
 Cruz Roja Boliviana  
 Curtin and PathWest  
 European Centre for Disease Prevention and Control  
 European Virus Archive goes Global  
 Heart to Heart  
 Institut Pasteur  
 Institute of Environmental Science and Research, New Zealand  
 International Federation of Red Cross and Red Crescent Societies  
 International GBS Outcome Study  
 International Medical Clinic  
 International Severe Acute Respiratory and Emerging Infection Consortium  
 Malteser International  
 Marie Bashir Institute for Infectious Disease and Biosecurity  
 National Institute for Communicable Diseases, South Africa  
 National Institute of Infectious Diseases, Japan  
 New South Wales Public Health Library  
 Peruvian Red Cross  
 Public Health Agency of Canada  
 Save the Children  
 UN Development Programme (UNDP)  
 UN High Commissioner for Refugees (UNHCR)  
 UN International Children's Emergency Fund (UNICEF)  
 UN International Strategy for Disaster Reduction (UNISDR)  
 UN Population Fund (UNFPA)  
 UN Women  
 Universal Postal Union  
 University of Sydney  
 University of Texas Medical Branch - Research  
 University of the West Indies  
 US Centers for Disease Control and Prevention  
 US Department of Health and Human Services  
 World Food Programme  
 World Vision

## WHO

Funds requested	US\$ 17 721 484
Funds received	US\$ 2 338 084
Funding gap	US\$ 15 383 400

*These figures exclude PAHO (see below).*

As of May 2016, the funding gap stood at US\$ 15.4 million plus the US\$ 3.8 million from the Contingency Fund for Emergencies which need to be reimbursed.

WHO is playing a lead role in facilitating the development of a research agenda that will address vital questions that must be answered to respond to the Zika virus outbreak. WHO has used its convening authority to bring together more than 250 experts at meetings and in working groups to produce guidance, set research priorities, and advise on surveillance and response strategies.

Data are the basis for public health research and action, and rapid data sharing is critical during an unfolding health emergency. WHO has addressed deficiencies with existing data-sharing mechanisms by creating the Zika Open Repository to allow open and early access to Zika-related research manuscripts that are awaiting publication in peer-reviewed journals.

Furthermore, WHO has also initiated an emergency research and development plan, tailored to the current state of understanding of Zika virus infection, which addresses the research and development needs for new methods of mosquito control, diagnostics, vaccines, and therapeutics. The plan also sets out a strategy for the coordination of supportive research activities, such as the validation of appropriate animal models.

Another crucial aspect of WHO's early response has been to ensure that information flows easily to those who need it most: the public, health workers, researchers, and policy-makers. WHO's dedicated Zika portal hosts a rich range of public information materials about Zika virus and its potential complications, including videos, Q&A's, factsheets, infographics and timelines. WHO has been listening to news and social media and managing rumours. WHO Zika tweets have been seen 31.8 million times. Facebook posts on Zika have reached over 8.9 million people, with as many as 287 000 users interacting with the posts.

Since the Zika outbreak was declared a Public Health Emergency of International Concern, WHO has published a weekly situation report on its dedicated Zika portal, ensuring the latest epidemiological data are publicly available. WHO headquarters also produce regular briefings and talking points for partners and key decision-makers.

WHO has rapidly produced and translated 16 expert guidance documents on topics ranging from psychosocial support for mothers to surveillance guidance for entomologists. In addition, WHO Zika apps for android and iOS mobile devices help keep health workers and the public connected to the latest guidance and developments. With constant new information, WHO has revised its approach since February 2016

and these changes will be reflected in the upcoming revised Strategic Response Framework in June.

In addition, the Western Pacific Regional Office (WPRO) had a partially activated Incident Management System and Emergency Operations Centre already running prior to declaration of the Public Health Emergency of International Concern as a result of recent Zika outbreaks in the region. This was then fully activated and adapted to the WHO headquarters IMS structure on 1 February 2016 to coordinate the response and share guidance documents and key information with Member States.

WPRO initially requested US\$ 3.8 million and have received just under US\$ 600 000, leaving a gap of US\$ 3.2 million.

WPRO has been the second most affected region after PAHO, with eleven countries and areas within the Region reporting locally acquired Zika cases in 2016. A total of 17 countries and areas have now reported vector borne Zika cases since the first large outbreak in Yap Island, Federated States of Micronesia in 2007.

WPRO has provided technical assistance to eight countries and areas through the deployment of eleven experts in epidemiology, entomology and risk communications. Laboratory testing equipment and vector control supplies have been provided to six countries and areas within the region.

WPRO will continue to support Member States in the management of Zika and its complications in line with the revised Strategic Response Framework.

## PAHO

Funds requested	US\$ 8 132 000
Funds received	US\$ 1 640 000
Funding gap	US\$ 6 492 000

PAHO has received approximately US\$ 1.6 million so far, but has an outstanding gap of US\$ 6.5 million.

In response to the declaration of the Public Health Emergency of International Concern pertaining to Zika-related complications, and with the intent to provide urgent support to Member States, on 1 February 2016, PAHO implemented an Incident Management Structure within the Organization's Emergency Operations Centre.

PAHO, WHO's Regional Office for the Americas has been the critical hub of the Zika response. To date, 35 countries and territories have confirmed local, vector-borne transmission of Zika virus in the Region of the Americas since 2015. Suspected and confirmed Zika virus cases have been showing a downward trend in some countries in the Americas, consistent with trends that have been observed in corresponding periods in previous years for other mosquito-borne diseases. Conversely, the trend of cases is still increasing in countries and territories in the Americas for which the outbreak started later, such as the Dominican Republic and Guadeloupe. At this stage, based on the evidence available, WHO does not see an overall decline in the outbreak. Vigilance needs to remain high.

PAHO has carried out 22 technical missions to 16 countries, procured laboratory supplies for 15 countries, conducted multiple workshops and technical meetings, and deployed many experts across the region to support countries. The essential activities that PAHO still needs to carry out can be split into surveillance, response and research. Surveillance includes missions to countries for implementation of surveillance guidelines, the provision of laboratory supplies to maintain virological surveillance for Zika and other arboviruses (viruses transmitted by blood-sucking arthropods), and the deployment of experts to affected countries. Under response, PAHO intends to conduct training, strengthen community participation, provide mosquito control material and support the management of Zika and its complications. PAHO's updated approach will be reflected in the revised Strategic Response Framework.

## AMERICARES

Throughout Latin America and the Caribbean, AmeriCares is partnering with hospitals and clinics to ensure they are well equipped to address the intensifying health crisis. AmeriCares is also working to improve education and prevention and ensure health providers have the medicine and supplies to provide the best possible care.

In Haiti, AmeriCares is working with a partner organization on a prevention program for expectant mothers, with the goal of keeping the women Zika-free until they deliver. In El Salvador, AmeriCares is developing a Zika-prevention program at its clinic, which provides primary and specialty care services for more than 60,000 patients annually, including prenatal care. As part of prevention efforts, supplies of insect repellent are being delivered to partners in El Salvador, Puerto Rico and Florida. Other Zika-specific supplies have been delivered to El Salvador, Dominican Republic and Nicaragua.

AmeriCares, which donates medicine and supplies to U.S.-based medical teams volunteering overseas, is also providing education materials to medical professionals working in Zika-affected countries. AmeriCares is supporting more than 150 medical teams planning travel to Latin America and the Caribbean through June.

## UNDP

Funds requested	US\$ 4 175 000
Funds received	US\$ 40 000
Funding gap	US\$ 4 135 000

Beyond the purely health-related considerations, there are important gender, economic/financial, social, and environmental considerations for the response. UNDP has provided inputs to WHO to ensure that different dimensions of the emergency are well addressed, such as the socio-economic impact and gender related issues. In this context, UNDP has identified four pillars of support – in line with the WHO Strategic Response Framework – that can play an important role in assisting countries to respond to the broader health and development threat posed by the Zika virus. The four main pillars and their respective requirements (up to and including June 2016) demanded an initial funding need of US\$ 4 175 000:

- A coherent UN system response at country level.
- Prevention technology procurement supply and management, related to vector control and case management.
- Communication and community engagement.



- Analysis of the socio-economic, gender-related, and human rights aspects of the response.

In order to strengthen UNDP's monitoring and response capacity and to support country offices and governments to respond to the broader health and development threat posed by Zika, a number of regional activities (LAC) are being undertaken:

- The deployment of experts to Latin America, the Caribbean and Brazil.
- A regional socioeconomic impact assessment in collaboration with the World Bank, PAHO and UNDP members of the Zika virus, with a focus on Brazil, Colombia and Suriname.
- Monitoring of country-level needs, and developing proposals that focus on the four pillars of support, such as integrated vector control, by working with communities as well the public and private sectors.

## UNFPA

Funds requested	US\$ 9 600 000
Funds received	US\$ 250 000
Funding gap	US\$ 9 350 000

Concerned by reports of the Zika virus spreading through sexual contact, the United Nations Population Fund (UNFPA) strongly urged governments and all other partners to provide information and access to voluntary family planning, including condoms. UNFPA's draft appeal had an estimate of approximately US\$ 9.6 million divided into three main activities:

1. Guarantee contraceptive security in affected countries and areas.
2. Implement a risk communications campaign.
3. Recruit and unite a network of trained providers for counselling and services.

Unfortunately, the response from donors so far has been disappointing. UNFPA has just received an award of USD\$ 250 000 from the government of Japan for Communications and RH supplies.

Other donors have expressed interest, but have not committed to funding Zika programs. In addition, UNFPA's emergency reserve fund has supported some country level activities. UNFPA has also received a donation in kind of female condoms and training and promotion materials from The Female Health Company (Colombia, El Salvador and Honduras have received donations of 10 000, 10 000 and 30 000 female condoms respectively).

Despite the large gap between funding requested and funding received, UNFPA has been active in family planning, communications work and interagency coordination. Aside from supporting Governments with supplies of reproductive health commodities, UNFPA LACRO is designing a Risk Communications Toolkit on Zika and Pregnancy. This is based on the key messages prepared by the Maternal Mortality Reduction Regional Interagency Working Group, in which UNFPA leads the technical secretariat. The Working Group has developed key advocacy messages on Zika incorporating a gender perspective, sexual violence, and needs of women. The finalized key messages have been shared by LACRO to all Country Offices of the region to be used in advocacy and communications strategies.

## UNICEF

Funds requested	US\$ 13 800 000
Funds received	US\$ 1 730 000
Funding gap	US\$ 12 070 000

In close collaboration with WHO, PAHO, the US CDC, and IFRC, UNICEF is making contributions at the global-level through developing technical guidance and involvement in working groups. UNICEF is also supporting the operational response by working with health ministries in Latin America & the Caribbean on mosquito control, community engagement and risk communication.

UNICEF has received US\$ 1.73 million out of the total US\$ 13.8 million originally requested (13% funded). Additionally, UNICEF Country Offices have reprogrammed US\$ 2.6 million of their existing internal resources, in addition to the US\$ 2 million emergency loan that was provided to kick start the response.

In Brazil, UNICEF is supporting the Ministry of Health and Ministry of Education through advocacy, communication and community mobilization, monitoring and technical support. UNICEF's social media has reached 1.9 million people and engaged 83 000 users in raising awareness of personal protection and reduction of mosquito breeding grounds. UNICEF has mobilized directly 174 municipalities classified as high-risk for mosquito infection, and potentially reached 2.2 million people.

Accurate diagnosis of the disease can be problematic, thus it has been difficult to develop a true picture of the epidemiological trends of the ZIKV. Therefore, UNICEF has been engaging with WHO, PAHO, the US Government, other partners, and industries to help drive the rapid development of Zika diagnostics and vaccines. The target product profile was finalized and published on 13 April 2016, defining the desired characteristics of point-of-care Zika diagnostic tests, to detect active infection and prior infection. Additionally, a programme of work is under development, including demand and procurement forecasts, industry consultation, advance procurement-like mechanisms, support to WHO technical assessment, as well as R&D procurement.

UNICEF has set out a modified approach for the remainder of 2016, particularly in respect of research and development, which will be used to inform the revised global response plan currently being developed by WHO. Needs are being regularly assessed as the situation evolves, aligned with WHO's Strategic Response Framework, and include a heavy emphasis on immediate research needs to expedite both diagnostics and vaccines. The funding of these activities will allow for the building of a foundation to continue sustainable work beyond July 2016. The other main areas UNICEF seeks funding for are risk communication and community engagement, and mosquito control.

## UN Women

Since 1 February 2016, when the World Health Organization (WHO) declared the Public Health Emergency of International Concern, UN Women has been working to ensure that the needs of women and girls are kept at the forefront of response planning and action. UN Women has adopted a "3C" strategic response, which stands for Convene, Communicate, and Coordinate.

Convene - making sure women's roles and needs are recognized; that effects of the crisis on women are understood; and that they are protected from its impact.

Communicate - accurately inform women and their families about prevention, risk evaluation and choice in the framework of human rights.

Coordinate - work with partners in the UN, International Community, Government, and Civil Society to ensure complimentary, non-duplicative actions that guarantee a strong focus on the gender and women's human rights dimension of the crisis.

In Brazil, UN Women, in collaboration with UNFPA and PAHO/WHO convened a meeting of 30 organizations from different parts of the country and representative of women's diversity (women and feminist, Afro Brazilian Women, community based, youth, sexual and reproductive health and rights organizations and networks) to discuss the most relevant issues facing women in the context of the Zika virus epidemics. In addition, since early March UN Women, UNFPA and PAHO/WHO have developed a communication strategy that is being implemented in partnership with the Brazilian Secretariat of Women Policies that includes the production of radio programmes disseminated through 2000 radio station across the country.

To date, UN Women has invested the equivalent of US\$ 200 000 of its own funds and an additional contribution of US\$ 100 000 from the Swedish International Development Agency (SIDA), against a total of US\$ 3.4 million required to enable activities in the following domains: risk communication and community engagement, vector control and personal protection, care for those affected, research and coordination.

## US CDC

US Centers for Disease Control and Prevention's (CDC) Emergency Operations Center (EOC) was activated on 22 January 2016, and moved to a level 1 activation—the highest level—on 8 February 2016. The EOC is the command center for monitoring and coordinating the emergency response to Zika, bringing together CDC scientists with expertise in arboviruses like Zika, reproductive health, birth defects, developmental disabilities, and travel health. The CDC's work includes:

- Developing laboratory tests to diagnose Zika.
- Conducting studies to learn more about Zika and its effects during pregnancy and the potential link between Zika and Guillain-Barré syndrome.
- Conducting a study to evaluate persistence of Zika virus in semen and urine among male residents of the United States.
- Monitoring and reporting cases of Zika, which will help improve its understanding of how and where Zika is spreading.
- Providing guidance to travelers and Americans living in areas with current outbreaks.
- Providing on-the-ground support in American Samoa, Brazil, Colombia, Guam, the Marshall Islands, Panama, Puerto Rico, Trinidad and Tobago, and the US Virgin Islands.

CDC's EOC is currently home to hundreds of CDC staff working in collaboration with local, national, and international response partners to analyze, validate, and efficiently exchange information about the outbreak. The EOC has resources to rapidly transport diagnostic kits, clinical specimens that will be tested for Zika virus, and personnel.

- The EOC is serving as CDC's command center for monitoring and coordinating the emergency response to Zika, including sending CDC staff and the procurement and management of all equipment and supplies that CDC responders may need during deployment.
- CDC is sending staff to assist with the response - senior leaders, vector control, emergency management, logistician, epi/surveillance, data entry, pregnancy and birth defects, and blood safety specialists, etc.
- CDC is working in laboratories and in dozens of countries, with ministries of health, and with partners around the world to develop a deeper understanding of Zika virus. It is also helping

to prevent, control, and respond to the Zika outbreak, along with outbreaks of other diseases like chikungunya, dengue fever, malaria, yellow fever, and other vector-borne diseases. CDC is working through its country offices, Field Epidemiology and Lab Training Programs, Global Disease Detection Centers overseas, Global Disease Detection Operations Center at CDC headquarters, Division of Parasitic Diseases and Malaria, and with international partners to:

- Alert healthcare providers and the public about Zika.
- Post travel notices and other travel-related guidance.
- Provide health laboratories with diagnostic tests. Through the CDC's Emergency Operations Center, CDC is assisting countries with Zika testing by supplying them with reagents for molecular diagnostic laboratory testing.
- Monitor and report cases of Zika, which will help improve its understanding of how and where Zika is spreading.
- Learn more about Zika and its effects during pregnancy as well as potential links between Zika and Guillain-Barré syndrome.

CDC is committed to global health security. It helps build the capacity of even the most vulnerable countries to detect, prevent, and respond to public health emergencies within their own borders. CDC staff are providing essential laboratory assistance, including:

- Organizing and triaging requests for Zika virus PCR reagents, needed for Zika diagnostics testing, from CDC's 10 Global Disease Detection Regional Centers and more than 30 countries.
- Standing up and operating regional Zika virus laboratory diagnostic capabilities at two of the most critical Global Disease Detection Regional Centers - the Central America Regional Center in Guatemala and the South East Asia Regional Center in Thailand.
- Developing a next-generation diagnostics card for acute febrile illness that tests samples of up to 8 people for 30 pathogens simultaneously, including Zika, delivering results in less than 3 hours.

Through its 24/7 Global Disease Detection Operations Center, regional Global Disease Detection Centers, country offices, and global Field Epidemiology and Laboratory Training Programs, CDC is working with governments, ministries of health, and international partners to conduct rigorous surveillance for new and emerging infections, identify and characterize new pathogens, develop and evaluate new laboratory methods, and train disease detectives in the countries in which it operates.

CDC's Global Disease Detection (GDD) Operations Center operates 24/7 and is continually carrying out event-based surveillance to monitor this outbreak globally. This center, in collaboration with Zika subject matter experts and international partners and governments, has been conducting event-based surveillance to monitor the spread of Zika from Brazil to other areas in the Americas since May 2015, sharing this information to coordinate the response.

The GDD program, launched in 2004, was one of the first ways CDC systematically began helping countries build the systems they need to prevent, detect and respond to health threats. Its regional centers are currently working with governments and international partners to provide data from the field back to CDC's Global Disease Detection Operations Center for global surveillance.

## **US HHS**

The United States government is working both domestically and internationally to explore all practical measures to prevent, detect, and respond to Zika virus infections. The U.S. Department of Health and Human Services (HHS) agencies are working closely with the

U.S. Department of State (DoS) and USAID to leverage its presence, resources, and partners in affected countries. The HHS is collaborating directly with foreign governments, WHO, the Pan American Health Organization, nongovernmental organizations (NGOs), and the private sector. HHS agencies such as the Food and Drug Administration, the National Institutes of Health, the Biomedical Advanced Research and Development Authority and the Centers for Disease Control and Prevention (CDC) are working around the clock with partners to combat the spread of the Zika virus.

## **World Vision**

Within the wider response, World Vision has been working to reduce the risk of exposure to Zika virus among at-risk people in affected areas of Brazil, Colombia, El Salvador, Honduras and Guatemala. Its response aims to enhance tracking and reporting of Zika virus disease, eliminate mosquito breeding sites, and promote prevention measures through the education of high-risk individuals, households, and communities.

To date, 111 institutional partners have reached a total of 1 107 043 beneficiaries and disseminated information regarding vector control strategies to a quarter of a million people. In addition to other community engagement activities, 5704 pregnant women received protection kits, 15 schools received cleaning kits and 73 mosquito control actions have been carried out in areas of high prevalence.

Of a total projected budget of US\$ 4.4 million, only US\$ 1.4 million has been received, leaving a funding gap of US\$ 3 million. In the remaining time until the end of the current strategy period (end of June 2016) priority World Vision Zika Response activities total US\$ 725 153. The main areas this funding would be targeted towards are: improving country capacity to decrease the number of breeding sites and viral diseases transmitted; increasing community understanding, acceptance, and support of mosquito control efforts through communication of health risks and prevention strategies; and increasing and improving perception and behaviour commensurate with public health risk.

## **The approach to a new strategy from July 2016**

As Zika virus spreads, our knowledge base is also expanding, and there is now scientific consensus that Zika virus is a cause of microcephaly and Guillain-Barré syndrome. Recent case reports also indicate a link between Zika virus infection and other neurological abnormalities, such as inflammation of the spinal cord and brain abnormalities in children who do not have microcephaly. WHO will continue to lead the harmonisation, collection, review and analysis of data that will shed further light on the precise nature of the relationship between Zika virus and its complications.

In May 2016, the United Nations Secretary-General Ban Ki-moon established the UN Zika Response Multi-Partner Trust Fund (MPTF) to finance critical unfunded priorities in the response to the Zika outbreak. The MPTF, which aims to provide a rapid, flexible and accountable platform to support a coordinated response from the UN system and partners, will directly support the Zika Strategic Response Framework. Contributions to the MPTF may be accepted from Member States, regional organizations, inter-governmental organizations, businesses and individuals. Donors will contribute to a central point and an Advisory Committee will direct funds to the

highest-priority activities in the affected countries. WHO supports and advises the Chair of the Advisory Committee on strategic issues for the MPTF and technical health issues.

Currently, WHO is working with partners to revise the Strategic Response Framework to run from July 2016 to the end of 2017 to guide international efforts against Zika, and to establish what structures will be necessary to implement this strategy. This will set the course for countries and partners to work together, with a mechanism to coordinate this work internally and externally. WHO headquarters and regional offices have conducted an initial planning session and are now developing a more detailed vision for the future response. Partners will be consulted on this through May 2016, to help develop the strategic objectives and coordinate their activities, in order for a new strategy to be published in mid-June 2016.