

## PAHO ACTIVITIES ON ZIKA PREVENTION AND CONTROL

The Pan American Health Organization (PAHO) Regional Office for the Americas of the World Health Organization (WHO) and key partners, have taken immediate actions to respond to the Zika outbreak since the first confirmation of cases.

In February 2014, the Chilean public health authorities confirmed the first case of autochthonous transmission of Zika virus infection in the Americas in Easter Island. Since that first notification, twenty-two additional countries and territories have confirmed indigenous circulation of Zika virus: Barbados, Bolivia, Brazil, Colombia, Dominican Republic, Ecuador, El Salvador, French Guiana, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Martinique, Mexico, Panama, Paraguay, Puerto Rico, Saint Martin, Suriname, US Virgin Islands, Venezuela. In addition, Regional dissemination of the virus is speeding up.

PAHO has issued five epidemiological alerts starting in May 2015. These epidemiological alerts provide updated information on the Zika virus situation as well as recommended public health measures on surveillance, including laboratory testing, case management, risk communications and vector control. In addition specific recommendations on neurological syndrome and congenital malformation in the context of Zika virus circulation. Epidemiological Alerts are available at: [www.paho.org/epialerts](http://www.paho.org/epialerts). A detailed dedicated website on Zika virus information is also available at [www.paho.org/zikavirus](http://www.paho.org/zikavirus).

### Regional Office

PAHO secretariat is working with Member States to strengthen their ability to detect and confirm cases of Zika virus infection, clinical management of cases, and implement effective strategies to reduce the presence of the mosquito and minimize the impact of Zika virus circulation locally. This work includes:

- Activation of the Emergency Operations Center (EOC) to help coordinate technical assistance and disease control activities
- Building laboratory capacity with partners to detect the virus in a timely manner and providing laboratory reagents to countries.
- Providing guidance to Member States to reduce the entomological risk (vector control) in affected areas by identifying high-risk areas and mosquito breeding sites, as well as by supporting engagement with affected populations to reduce mosquito populations and breeding sites; and providing larvicide to treat standing water sites.
- Preparing recommendations for clinical care and follow-up of patients with signs and symptoms of Zika, including pregnant women and newborns, in collaboration with national professional associations and experts.
- Supporting Member States on the early detection, monitoring and response to acute neurological forms.
- Supporting Member States to monitor the trend and geographical spread of the virus as well as neurological and autoimmune complications and its potential impact on public health.
- Coordinating with health officials in its member countries and partners such as Brazil's Fiocruz, US Centers for Disease Control and Prevention, and the Pasteur Institute International Network to support and promote research on Zika virus and its consequences, including the suspected link between Zika and microcephaly in newborns.
- Advising on risk communication to respond to the introduction of the virus in a given country, including the development of a guidance action plan and the establishment/creation of rapid response expert teams.
- Developing a set of communication materials including the launch of a website, FAQs, social media messages, videos with experts, press releases and webnotes, vector control interactive games; internal talking points and updates, and media monitoring.

### Country Support

- Working with the Brazilian Ministry of Health and the State of Pernambuco Health Secretariat to assess the relationship between Zika virus and the increase in cases of microcephaly in newborn babies.
- PAHO staff and experts from partner institutions mobilized through the Global Outbreak Alert and Response Network (GOARN) have also provided technical cooperation in areas such as case definition of microcephaly, laboratory diagnosis, integrated surveillance of arboviruses (dengue, chikungunya and Zika), and monitoring and tracking of cases.
- Provision of technical assistance for the development and implementation of a case-control study in Pernambuco to further assess the association between risk factors and microcephaly.
- Supporting health authorities from all Member States in the elimination of mosquito breeding sites, including through the distribution of larvicide to treat standing water sites.
- Preparation and dissemination of technical documents and guidelines for laboratory diagnosis, microcephaly monitoring, clinical management of pregnant women and newborns, and risk communications.
- Organization of a Southern Cone Conference in Argentina for DEN, CHIK and ZIK preparedness
- Missions to support preparedness in Barbados, Bolivia, Brazil, Dominican Republic, Ecuador, Haiti, Honduras and Paraguay.

A sustained and well-functioning surveillance and rapid response system as well as countries readiness to respond to new potential cases have been put in place.



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## UPCOMING EVENTS

Multiple key technical meetings have been organized for country readiness and early response. These upcoming events include:

- Laboratory Training Workshop for Zika detection for Andean countries, Central American Countries in Brazil and Nicaragua.
- Expert Consultation for Zika clinical surveillance, Washington DC.
- Laboratory Training and Vector control subregional workshops for central American countries, Nicaragua.
- Experts Meeting on Zika regional laboratory surveillance, and meeting of the Latin American Network on Arboviruses Diagnostic ( RELDA); Dengue WHO Collaborating Centers Meeting, Puerto Rico.
- Expert Consultation on Zika virus research agenda and its implications for public health in the Americas, Washington DC.
- Meeting of the PAHO Technical Advisory Group on public health entomology, Washington DC.
- Technical missions to Colombia, El Salvador, Jamaica, Nicaragua and Suriname



### Keeping the Americas Healthy

In October 2015, Brazil reported the detection of an unusual increase of newborns with microcephaly in the state of Pernambuco, in the northeast. By January 27th, 4,180 suspected microcephaly cases, including 68 deaths; of which 270 have been confirmed as related to Zika virus, 462 discarded and 3,448 remain under investigation. Among fatal cases, 12 have been confirmed as related to Zika virus, 5 discarded and 51 remain under investigation. Other symptoms have also been associated with Zika virus circulation. In January 2016, three newborns with presumed intrauterine Zika virus infection were found to have microcephaly, cerebral calcifications, and eye damage in the macular region.

While the body of evidence linking Zika virus infection and microcephaly is still growing, several findings strengthen the association of Zika virus infection in pregnancy and neurological anomalies at birth. In January 2016, the Ministry of Health of Brazil reported on the detection of Zika virus genome in four cases of congenital malformation of the state of Rio Grande do Norte. Tissue samples from both newborns were also positive for Zika virus by immunohistochemistry. Also, Zika virus genome was also detected in the amniotic fluid of two pregnant women in the State of Paraiba, whose fetuses showed microcephaly in sonograms. Finally in January the ICC / Fiocruz laboratory in Paraná confirmed the presence of Zika virus in the placenta of a pregnant woman from the Northeast region of Brazil, who had suffered a miscarriage in the first trimester of pregnancy.

Even before this evidence came to light, PAHO immediately initiated its preparedness efforts by deploying virologists to countries of the Region to train and enhance the capacity of countries in the Region to detect introduction of the virus. In addition, PAHO continued its efforts in marshaling evidence and newly-generated data from affected countries.