





Brazil sees sharp rise in chikungunya cases

Cláudia Collucci

São Paulo

Brazil recorded 170 000 cases of chikungunya virus disease in the first half of this year—10 times the number seen in the same period in 2015, health ministry records show. Deaths have also risen from six in 2015 to 38 so far this year.¹

Brazil now accounts for 94% of confirmed cases of the disease in the Americas, according to the Pan American Health Organization.²

Chikungunya virus is transmitted by the *Aedes aegypti* mosquito, the same mosquito that carries the Zika virus—which has been declared a public health emergency in Brazil—and dengue fever.

The virus is circulating in almost half of all Brazilian cities and the ministry of health has predicted an epidemic next summer.

Up to 20% of those infected have been left with health complications, such as arthritis and arthrosis, for months or years. The disease can also be transmitted to babies during childbirth, causing neurological damage and death. Three states in Brazil (Pernambuco, Bahia, and Paraíba) have so far reported vertical transmission of chikungunya.

In July, the Recife health department reported that chikungunya fever had caused the deaths of a fetus and a newborn baby. Until then, deaths from the virus had been confined to the elderly population.

Also in July researchers from Bahia reported the first case of chikungunya encephalitis acquired in the perinatal period during the current outbreak in Brazil.³

There is no specific treatment for chikungunya; the main symptoms of fever and joint pain, which can be intense and disabling, are treated symptomatically.

Marcos Boulos, disease control coordinator at the São Paulo state health department, said: "Chikungunya is worrying the health services a lot. Overcrowded emergency rooms are operating on the edge. In most cases the symptoms disappear within six months, but some patients may be left with permanent sequelae."

By early August, 4987 cases of chikungunya were reported in São Paulo, with 834 confirmed. Throughout 2015 there were 1505 notifications of the disease with 189 confirmed cases.

Artur Timerman, president of the Brazilian Society of Dengue and Arbovirus Infections, said that the explosion in the number of cases showed that the *Aedes aegypti* mosquito was more present than ever.

"The current combat strategy is ineffective and the mosquito is resistant to insecticides. We are running out of options," he said.

Basic sanitation in Brazil needed to improve, according to Timerman.

For now, he said that health services needed urgently to prepare to deal with people who were affected by the long term complications of infection.

Brazil's ministry of health said that the increase in cases was because chikungunya was a relatively new disease and the population was vulnerable. Chikungunya was first described in 1952 in Tanzania and has since been identified in 60 countries.

- Brazilian Ministry of Health. 2016. Boletim epidemiológico. 2016. portalsaude.saude.gov. br/images/pdf/2016/agosto/09/2016-026.pdf.
- Pan American Health Organization. Chikungunya: PAHO/WHO data, maps, and statistics 2016. 2016. www.paho.org/hq/index.php?option=com_topics&view=rdmore&cid=8379& Itemid=40931.
- 3 Bandeira AC, Campos GS, Sardi SI, Rocha VF, Rocha GC. Neonatal encephalitis due to Chikungunya vertical transmission: First report in Brazil. *IDCases* 2016;5:57-9. doi:10. 1016/j.idcr.2016.07.008. pmid:27500084.

Published by the BMJ Publishing Group Limited. For permission to use (where not already granted under a licence) please go to http://group.bmj.com/group/rights-licensing/permissions