

# Chikungunya in Colombia: Chronicle of an Epidemic Foretold

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**Abstract.** Chikungunya virus has recently emerged in the Americas. Despite the fact that some papers about this situation have been published, the epidemiological information is now outdated, due to the rapid advance of the virus and the poor measures available to prevent its spread to different countries like Colombia. In this article, it is shown information about the situation of Chikungunya in Colombia, country that was not prepared, like many others, for the arrival of the virus. Seeing that the number of cases is on the increase, it is important to improve activities such as vector control, active screening of compatible cases, and community education, as the only ways to avoid the propagation of Chikungunya in the Americas. **Palabras clave:** tuberculosis, programas de control, diagnóstico, tratamiento, prevención.

**Keywords:** Colombia, emergent disease, epidemic, vector, Chikungunya.

## Chikungunya en Colombia: crónica de una epidemia prevista

**Resumen.** El virus del Chikungunya apareció recientemente en América Latina. A pesar de que algunos artículos sobre este tema han sido publicados, la información epidemiológica permanece desactualizada, debido al rápido avance del virus y a las escasas medidas para prevenir su proliferación a diferentes países como Colombia. En este artículo, se presenta información sobre el Chikungunya en Colombia, país que no estaba preparado, como muchos otros, para afrontar este virus. En vista de que el número de casos ha ido en aumento, es importante fortalecer actividades que detengan la propagación por el continente, como el control de vectores, el cribado activo de casos compatibles y educación a la comunidad.

**Palabras clave:** Colombia, enfermedad emergente, epidemia, vector, Chikungunya.

## Chikungunya em Colômbia: crônica

## de uma epidemia prevista

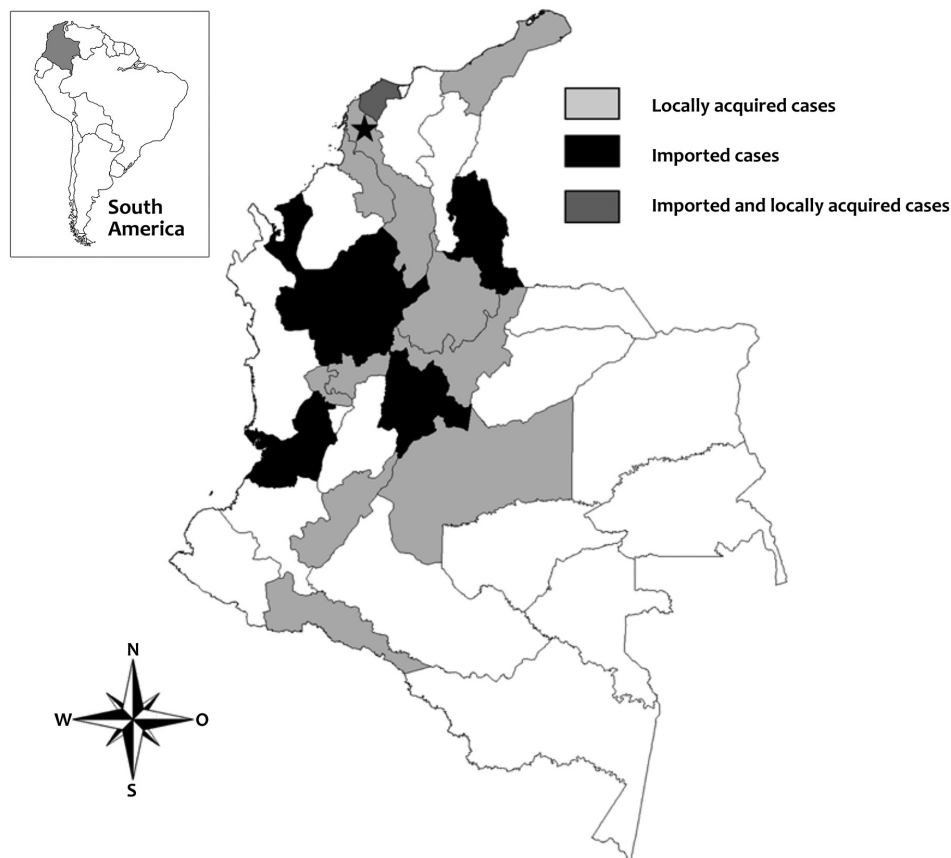
**Resumo.** O vírus do Chikungunya surgiu recentemente na América Latina. Embora alguns artigos sobre esse tema já tenham sido publicados, as informações epidemiológicas ainda permanecem desatualizadas, por causa do rápido avanço do vírus e também as poucas medidas na prevenção da sua proliferação para diferentes países como a Colômbia. Neste artigo são apresentadas informações sobre o Chikungunya na Colômbia, país que não estava preparado, como muitos outros, para enfrentar esse vírus. Devido a que o número de casos tem aumentado, é importante fortalecer atividades que parem a propagação pelo continente, como o controle de vetores, o crivado ativo de casos compatíveis e educação à comunidade.

**Palavras-chave:** Colombia, doença emergente, epidemia, vector, Chikungunya.

A recent “perspective” in *The New England Journal of Medicine* has presented an extraordinary panorama about the emergence of Chikungunya virus in the Americas [1]. However, due to both the rapid advance of the virus and the poor measures available to prevent its spread, the epidemiological data are now outdated. Just a few days after publication of that paper, the first four cases of locally acquired Chikungunya in Colombia were reported in Mahates (a municipality close to Cartagena in the Colombian Caribbean) [2].

Despite alerts about the imminent arrival of the virus to South America, preparations in Colombia

were insufficient to lead to efficient surveillance. This was just two days after the confirmation of the first 253 cases reported, and two weeks later, the virus was present in 27 municipalities, mainly in the Caribbean region of Colombia (figure 1). As of November 10<sup>th</sup>, Colombia had 22,372 confirmed cases, and suspected cases have been reported in almost all the country [2]. This big increase in case numbers is an indication that the virus had been in the country for several weeks before the first report and that the surveillance system had not been efficient.



**Figure 1.** Map of Colombia depicting areas of autochthonous transmission or imported cases of Chikungunya virus infection as of September 26th, 2014 (two weeks after first report). The black star indicates Mahates municipality where Chikungunya cases were first detected

Source: Compiled by the authors

Taking into account that Colombia has been an endemic country for dengue (only as of November 6<sup>th</sup> there have been 89,570 dengue virus cases), and that the simultaneous circulation of *Aedes aegypti* and *Aedes albopictus* in some areas of the country has been reported [3], it was expected that the surveillance system was able to respond better to chikungunya. However, we consider that Colombia was not prepared for the arrival of chikungunya and thus the outbreak was imminent.

In contrast, Brazil, for example, which has a similar epidemiology for vector diseases such as dengue (547,612 dengue virus cases as of November 6<sup>th</sup>), reported its first locally acquired Chikungunya case on September 16<sup>th</sup> in Amapá. After one week of surveillance, only seven cases were reported and, as of November 7<sup>th</sup>, only 173 confirmed cases had been reported [4], including the molecular confirmation of the African genotype of Chikungunya [5].

This epidemiological panorama leads us to encourage all local Latin American governments to increase efforts to actively prevent the spread of Chikungunya virus. It is clear that the virus is going to enter all countries where the vector is present and, for these reason, the money invested in early activities such as vector control, active screening of compatible cases and community education will be the only way to avoid the propagation of Chikungunya; otherwise, the disease will easily saturate the fragile health systems in Latin America. We would also like to encourage governments to strengthen dengue surveillance, because the

challenge of Chikungunya should not make us decrease surveillance against dengue in endemic countries.

Authors declare no potential conflict of interest relevant to this article.

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