

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



de S, TH; Reis-Santos, B; Rodrigues, LC (2016) Zika outbreak, mega-events, and urban reform. *Lancet Glob Health*, 4 (9). e603. ISSN 2214-109X DOI: 10.1016/S2214-109X(16)30174-7

Downloaded from: <http://researchonline.lshtm.ac.uk/2782787/>

DOI: [10.1016/S2214-109X\(16\)30174-7](https://doi.org/10.1016/S2214-109X(16)30174-7)

Usage Guidelines

Please refer to usage guidelines at <http://researchonline.lshtm.ac.uk/policies.html> or alternatively contact researchonline@lshtm.ac.uk.

Available under license: <http://creativecommons.org/licenses/by/2.5/>

Zika outbreak, mega-events, and urban reform

In a passionate Editorial, *The Lancet Global Health* defends a human rights approach to Zika virus,¹ and includes mosquito control as part of the “sound recommendations, duly relayed by health authorities”. We would like to argue the case for a rights-based approach to mosquito control, which would be aimed not at small-scale tinkering in the environment but at large-scale urban transformation, as proposed in the early drafts of the New Urban Agenda. Such an approach encompasses, among others, the right to the city, the right to health, and the right to freedom of movement. Faria and colleagues² suggest that large-scale patterns in human mobility, including the role of mega-events,³ should be assessed to understand the epidemiology of the virus. Since 2010, Brazil has hosted a series of mega-events, with delegations from all over the world. These have included the 2011 Military Games, the 2013 Salesian Youth Movement world meeting (with the Pope’s visit), the 2013 Fédération Internationale de Football Association (FIFA) Confederations’ Cup, the 2014 FIFA World Cup, and all the preparatory games for the 2016 Olympics. Beyond changes in human mobility, there are other effects of hosting mega-events that should be discussed.

Families living in well located informal settlements have been displaced from their homes to make way for mega-event structures and urban gentrification projects.⁴ By 2013, approximately 40 000 people had been removed from their homes in Rio de Janeiro as a direct consequence of mega-event stadium construction,⁵ and a greater number of these have been forced to move from informal settlements in areas with reasonable infrastructure

to the outskirts of the cities on account of increased real estate valuation. They will join many already living in poor areas—where sanitary conditions and waste management are worse—increasing the proportion of the population forced to store water and the amount of garbage thrown in water streams, blocking water flow, both of which favour the proliferation of *A aegypti*, the vector of Zika, dengue, and chikungunya viruses.

Despite being highly beneficial for its partners and organisers—the highest profit in history for FIFA occurred in the 2014 World Cup in Brazil—mega-events in Brazil have not conformed to the guidelines of the New Urban Agenda, resulting in clear health and societal harms, and have contributed to the increased circulation of Zika virus in the Americas. Governments and societies must take the New Urban Agenda into consideration if they wish to seriously engage in controlling *A aegypti* whenever deciding to host mega-events; and, if such events take place, preparations should respect this new agenda.

We declare no competing interests. THdS was supported by the Brazilian Science without Borders Scheme (process number: 200358/2014-6) and the São Paulo Research Foundation (process number: 2012/08565-4). BR-S was supported by International Clinical, Operational and Health Services Research Training Award (ICOHRTA grant: 5 U2R TW006883-02) from the National Institutes of Health (Bethesda, Maryland, United States).

Copyright © The Authors. Open Access article distributed under the terms of CC BY.

Thiago Hérick de Sá,
***Bárbara Reis-Santos,**
Laura C Rodrigues
reissantos.barbara@gmail.com

Department of Nutrition, School of Public Health, University of São Paulo, São Paulo, Brazil (THdS); LabEpi Laboratory of Epidemiology, University of Espírito Santo, Vitória 29040-091, Brazil (BR-S); and London School of Hygiene & Tropical Medicine, London, UK (LCR)

- 1 The Lancet Global Health. The right(s) approach to Zika. *Lancet Glob Health* 2016; **4**: e427.
- 2 Faria NR, Azevedo Rdo S, Kraemer MU, et al. Zika virus in the Americas: early epidemiological and genetic findings. *Science* 2016; **352**: 345–49.

3 Elachola H, Gozzer E, Zhuo J, Memish ZA. A crucial time for public health preparedness: Zika virus and the 2016 Olympics, Umrah, and Hajj. *Lancet* 2016; **387**: 630–32.

4 Paula MD, Bartelt DD. Copa para quem e para quê? Um olhar sobre os legados dos mundiais de futebol no Brasil, África do Sul e Alemanha. Rio de Janeiro, Brasil: Fundação Heinrich Böll, 2014.

5 Comitê Popular Rio Copa e Olimpíadas. Megaeventos e violações dos direitos humanos no Rio de Janeiro. Rio de Janeiro Brasil; Fundação Heinrich Böll, 2013.



For the New Urban Agenda see <https://www.habitat3.org/the-new-urban-agenda/policy>