



## **STUDY OF DENGUE NOTIFICATIONS IN THE STATE OF RORAIMA BETWEEN 2010 AND 2020**

I Integrative International Congress on Animal and Environmental Health, 1ª edição, de 25/06/2024 a 28/06/2024  
ISBN dos Anais: 978-65-5465-100-4

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### **RESUMO**

Dengue is an acute febrile infectious disease caused by a virus belonging to the family Flaviviridae, genus Flavivirus, which presents four serotypes known as DENV-1, DENV-2, DENV-3, and DENV-4 in Brazil. Its transmission occurs through the bite of the female *Aedes aegypti* mosquito. Roraima is a geographic region that acts as an entry point for pathogens due to its access to the Anglophone Caribbean through Guyana and Venezuela. Its climatic characteristics allow easy reproduction of mosquitoes. The state experienced unregulated migratory flows, primarily at the end of the 1980s due to mining activities and more recently, from 2016 onwards, due to the Venezuelan socio-economic crisis. These events caused a demographic increase without planning, leading to socio-environmental and basic sanitation problems. The study aimed to understand the notifications, prevention, and evolution of dengue between 2010 and 2020 in the state of Roraima. The data used were provided by the 2020 Roraima Annual Epidemiology Report. The total number of disease notifications during the period was 41,728. The highest number of records occurred in 2010 with 11,817 notifications, due to the reintroduction of the DENV-4 serotype in the country, and 2014 was the year with the lowest number of records (2,229). In 2011, 3,050 cases were reported, a decrease that can be attributed to the production of antibodies in the infected population. In 2012 (4,586), there was an increase linked to a lack of infrastructure and basic sanitation. During the period from 2013 to 2014 (2,282 - 2,229), the numbers decreased due to the natural immunization of the population to the DENV-4 serotype resulting from the 2010 epidemic. In 2015 and 2016, the average number of notifications remained consistent (2,804 - 1,944). In 2017 (4,896), there was an increase in all arboviral diseases, including dengue, associated with the migratory flow of Venezuelans to Roraima. In 2018, there was a reduction of about 83% in the number of disease cases, attributed to educational campaigns. In 2020, the COVID-19 pandemic led to a decrease in the notification and diagnosis of other diseases, including arboviral diseases. Thus, it is evident that there is a lack of information about actions to combat these diseases in the state during the period from 2010 to 2020.

**PALAVRAS-CHAVE:** Epidemic, Prevention, Public Health, Sanitation

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