

SPATIAL DISTRIBUTION OF ANIMAL RABIES IN THE STATE OF CEARÁ, BRAZIL, 2003 - 2023



Authors: Katariny Michelle de Araújo Pinheiro Tavares¹, Ana Maria Peixoto Cabral Maia², Luiz Osvaldo Rodrigues da Silva², Naylê Francelino Holanda Duarte³, Raoane Silva Siqueira⁴, Carlos Henrique Alencar¹

1. Graduate Program in Public Health - School of Medicine - Federal University of Ceará
2. Health Department of Ceará
3. FIOCRUZ - Brasília
4. Oros Municipal Secretaria - CE

Thanks: Central Public Health Laboratory from Ceará's State

INTRODUCTION

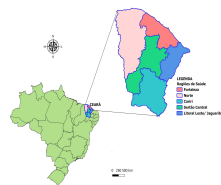
Rabies is a neglected zoonosis and a public health issue in Ceará.

OBJECTIVE

To describe the spatial distribution of animal rabies in the state of Ceará from 2003 to 2023.

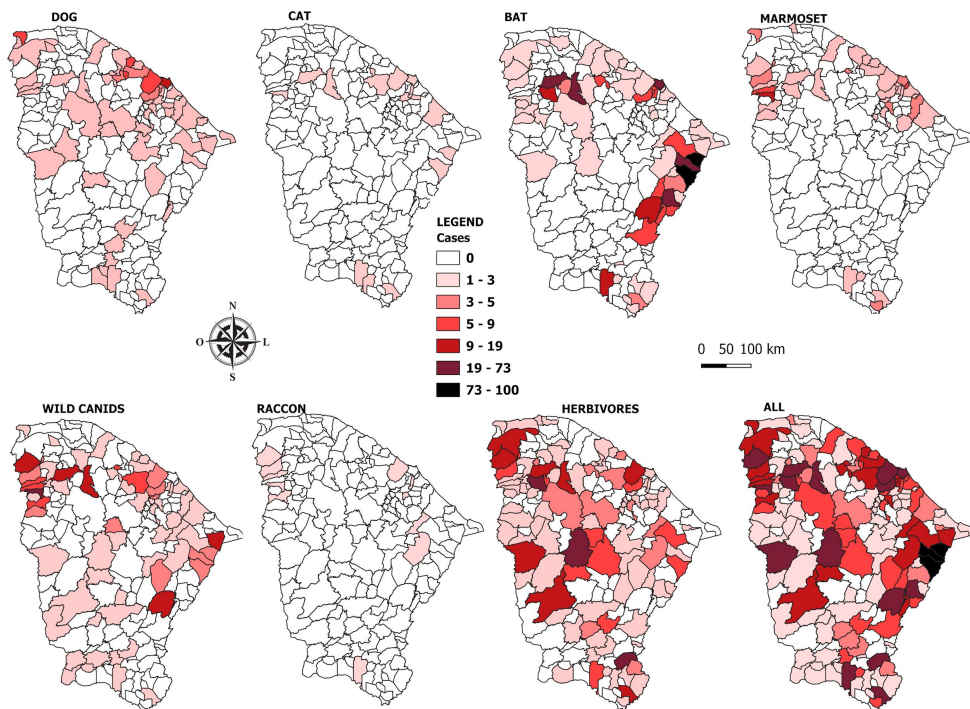
METHODS

Ceará, in Northeast Brazil, is subdivided into 184 municipalities, with Fortaleza as the capital. Data from the Health Department and the Agricultural Defense Agency of Ceará were used. Positive cases were those laboratory-diagnosed by direct immunofluorescence and biological testing. Maps were created by animal species and municipality of occurrence using QGIS software.



RESULTS

-19,249 samples, 1,377 (7.3%) positive, distributed across 143 (77.7%) municipalities.



CONCLUSION

Animal rabies is heterogeneously distributed in Ceará. The capital and metropolitan area concentrate cases in domestic animals, while cases in wild animals, particularly non-hematophagous bats—the main virus reservoir—are found in the eastern, northwestern, Fortaleza, and metropolitan regions, representing a warning sign. Special attention should be given to “silent municipalities” bordering those with viral isolation, indicating a likely failure in epidemiological surveillance.