



**Chagas Disease in Brazil: A Geographical Overview**  
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**Introduction:** Chagas disease remains endemic in the continent of America. This project aims to build an analysis of the disease situation in Brazil, developing a geo-epidemiological overview. It has been particularly regarded as enzootic and ignored. The infection is caused by the protozoan *Trypanosoma cruzi* circulating in the environment and in mammalian host sand in Reduviidae triatomine vectors. There is greater awareness of the problem nowadays, even if it under-reported. It is the result of an historical process of territorial reorganization following the industrial revolution of the last century. Furthermore, due to low rates of vector infestation and reduced incidence rates, surveillance and control have only been implemented in residual areas, leading to the establishment of new foci of vector transmission. **Methodology and development:** The research is based on the hypothesis that diverse elements – notified acute cases and their modes of infection, location of vectors and their natural or man-made reservoirs, chronic cases and their respective age groups – the majority coming from the database of the National Health System, form part of a reality to be made known. The procedures and knowledge of geographical science – GIS, geo-statistics and mapping – are used to interpret clinical data concerning morbidity and eco-epidemiology, and thus map the new challenges to the country of American trypanosomiasis as cyclic urbanization and new patterns of infection accumulate in distinct time frames overlapping the spatial study of disease. This is in the context of major environmental changes in the countryside and an intense process of fragmentation of monitoring procedures, with the municipalization of surveillance services, resulting in a realignment of complex pathogenic disease from the start of the twenty-first century. **Final thoughts:** Technically, the challenge of Chagas disease in Brazil pertains to the care of those infected, the quality of the health system and of the environment, particularly in the north-east (Caatinga) and the Amazon Rain Forest. The benefit of map making, up-to-date GIS and appropriate interpretation, combined with an understanding of space with digital representation, meet the demands of this project.

**Keywords:** American trypanosomiasis, geo-processing, pathogenic complex.