



## Epidemiological Profile of Headache-Related Hospitalizations in Brazil: A Five-Year Analysis (2018- 2022)

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**Categoria:** Epidemiologia, Desfechos e Impacto das Cefaleias

### Introduction

Headaches are significant neurological complaints addressed in Brazil, representing a significant challenge to the public healthcare system due to their high prevalence and difficult treatment in some cases. Many clinical conditions can be associated with headaches, which can be characterized as primary headaches when pain is the primary manifestation of the disease, or secondary headaches when they are caused by an identifiable underlying condition. This symptom leads many patients to seek medical assistance in different contexts, from primary healthcare to emergency departments, so its management must be adapted to each situation. Thus, it is important to understand the characteristic epidemiology of headaches due to its relevance to medical practice.

### Objective

This study aims to assess the epidemiological profile of patients hospitalized in Brazil due to headaches in the last 5 years (2018-2022). For this purpose, descriptive variables associated with hospitalizations for headaches, such as region, age group, and gender, were compared.

### Methods

This analysis was conducted through a retrospective, descriptive, and cross-sectional study, carried out with information released by the Hospital Information System (SIH/SUS) and the Brazilian Institute of Geography and Statistics (IBGE). With this data, the described variables were evaluated, comparing them among themselves.

### Results

During this period, 50713 hospitalizations for headaches were recorded in Brazil. The year with the highest number of hospitalizations was 2019, with 11996 (23.65%) patients hospitalized for this clinical condition. In 2018, there were 11142 hospitalizations in the country, decreasing to 10291 in 2022, a reduction of 7.63% in the analyzed period. At the beginning of this period, the Brazilian region with the most hospitalizations was the South region, with 3372 patients hospitalized (30.26%) in 2018. However, in 2022, the Northeast region had the highest number of hospitalizations for headaches, with 3379 admissions (32.83%). Furthermore, the region with the highest relative increase in the analyzed parameter during this period was the North region, with a 78.51% increase in hospitalizations.

Regarding age group, people aged over 30 years represented 66.72% of the hospitalizations for headaches. Additionally, it was observed that women accounted for 65.25% of the patients during the evaluated years.

### Conclusion

In conclusion, this study provided a better understanding about epidemiological trends of headache-related hospitalizations in Brazil over the past five years. The findings highlight the significant burden that headaches pose to the healthcare system, necessitating careful consideration and tailored management strategies. The observed fluctuations in hospitalization rates across different regions and years underscore the dynamic nature of this healthcare issue, warranting further investigation.

**Palavras-chave:** Epidemiology; Brazilian Regions; Hospitalization.