

EPIDEMIOLOGICAL RISK OF GASTRIC CANCER IN PARÁ AND ASSOCIATED DIETARY FACTORS: AN ANALYSIS USING SISCAN DATA (2020–2025)

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Introduction: Gastric cancer ranks among the leading malignant neoplasms in Brazil, with particular prominence in the Northern Region, where it represents a significant cause of morbidity and mortality. In the state of Pará, this scenario is exacerbated by socioeconomic disparities, barriers to accessing healthcare services, and high exposure to environmental and dietary risk factors. According to the Brazilian National Cancer Institute (INCA), factors such as excessive salt intake, obesity, *Helicobacter pylori* infection, and specific occupational conditions significantly increase the likelihood of disease development. **Objectives:** To analyze the incidence and temporal distribution of gastric cancer cases (ICD-10 C16) in the state of Pará between 2020 and 2025 using data from the Cancer Information System (SISCAN), and to identify the main dietary and occupational risk factors associated with increased risk, based on INCA evidence. **Methodology:** This is a descriptive epidemiological study using secondary data obtained from the DATASUS and Tabnet platforms. All records of new gastric cancer cases among residents of Pará from January 2020 to May 2025 were included. The analysis considered annual incidence and regional distribution, with emphasis on the Northern Region of the state. **Results:** From January 2020 to May 2025, a total of 1,687 cases of gastric cancer were reported in the state of Pará. A higher concentration of cases was observed in the Northern Region, accounting for over 96% of annual records across all analyzed years. In 2020, 292 cases were recorded, with 282 (96.6%) in the Northern Region. In 2021, there was a substantial 49% increase, totaling 435 cases, of which 424 (97.4%) occurred in the same region. In 2022, the number decreased to 339 cases (330 in the Northern Region), followed by further reductions in 2023 and 2024, with 307 and 301 cases, respectively. As of May 2025, 13 new cases had been reported, suggesting potential underreporting or delays in data consolidation for the current year. Temporal analysis revealed fluctuations in incidence over the study period, with a peak in 2021 possibly related to the resumption of elective care services following restrictions imposed by the COVID-19 pandemic, leading to the diagnosis of previously undetected cases. Geographically, the persistent concentration of cases in the Northern Region of Pará may be associated with high social vulnerability, inadequate basic sanitation, greater consumption of traditionally salt-preserved foods, and a high prevalence of *H. pylori* infection, a well-established etiological factor. **Conclusion:** Gastric cancer in the state of Pará constitutes a serious public health issue of multifactorial origin, characterized by high prevalence and uneven regional distribution. These findings highlight the need for comprehensive prevention and surveillance strategies, including

the promotion of healthy dietary habits, control of infectious and environmental factors, implementation of anti-smoking and alcohol abuse policies, and occupational safety measures aimed at reducing exposure to carcinogenic agents.

Keywords: Gastric cancer; Dietary risk factors; Epidemiology.