

<https://doi.org/10.29289/259453942022V32S2023>

# THE IMPACT OF THE COVID-19 PANDEMIC ON THE PERFORMANCE OF MAMMOGRAPHIES IN THE BRAZILIAN NORTHEAST: AN ECOLOGICAL STUDY

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**Objective:** The aim of this study was to evaluate breast cancer screening according to demographic data, year of completion, age group, and geographic distribution in the pandemic period. **Methods:** An ecological study was carried out using data collected by the Departamento de Informática do Sistema Único de Saúde (DATASUS). The study population included patients who underwent screening for breast cancer in northeastern Brazil between 2019 and 2021. **Results:** The National Cancer Institute recommends biannual breast cancer screening through mammography for women aged 50–69 years. However, in 2020, the COVID-19 pandemic generated consequences such as the withdrawal of patients from health services, interfering with the performance of preventive mammography. In northeastern Brazil, 879,903 mammograms were performed on female patients in 2019, a number that was reduced by 39.23% in 2020 (534,647) and 5.68% in 2021 (829,902). A drop was also found in the number of examinations per target audience, especially in the year 2020 (40.36%) when compared to the year 2019, with the age group 50–54 years having the largest reduction, with a drop of 40.05%. It was found that between 2019 and 2020, all northeastern states had a drop in the number of examinations performed, with the largest drop being in Sergipe (52.54%). Despite this, in 2021, some states showed an increase in the number of examinations performed when compared to 2019, with Piauí standing out (50.54%). **Conclusion:** In the COVID-19 pandemic, there was a decrease in breast cancer screening between the years 2019 and 2020 in northeastern Brazil, with a discrete rise in the number of examinations performed in some states in 2021. The youngest age group of the target audience was the most negatively impacted. Thus, the need to use these data to formulate public policies to encourage screening and reduce morbidity and mortality from breast cancer is evident.

**Keywords:** Medical oncology. Mass screening. Breast neoplasms. Mammography. Brazil.