

# PREMATURE MORTALITY FROM CHRONIC NONCOMMUNICABLE DISEASES ASSOCIATED WITH AIR POLLUTION IN BRAZIL AND REGIONS, 2023

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**INTRODUCTION:** chronic noncommunicable diseases (NCDs) are the main sources of disease burden in Brazil, being responsible for approximately 72% of deaths. In 2021, air pollution was responsible for 8.1 million deaths worldwide. Both NCDs and air pollution are associated and are on the rise in the country. **OBJECTIVE:** to describe the premature mortality rate from chronic non-communicable diseases associated with air pollution in Brazil and its regions, in 2023. **MATERIAL AND METHODS:** ecological study with data from the Mortality Information System of DATASUS. Premature mortality rates, considered from 30 to 69 years old, were calculated from the number of deaths divided by the local population using data from Census projections for 2023. The causes, according to the International Statistical Classification of Diseases and Related Health Problems (CID-10), used were: bronchial and lung cancer, tracheal cancer, cerebrovascular diseases, ischemic heart diseases and chronic obstructive pulmonary disease. **RESULTS AND CONCLUSION:** in Brazil, ischemic heart disease (50.3) and cerebrovascular disease (34.2) were the diseases that presented the highest premature mortality rates per 100,000 inhabitants, followed by bronchial and lung cancer (14.1), chronic obstructive pulmonary disease (10.4) and tracheal cancer (0.04). The Southeast region had a premature mortality rate of 54.3 per 100,000 inhabitants for ischemic heart disease and the South region, 22.1 and 16.2, for bronchial and lung cancer and chronic obstructive pulmonary disease, respectively. Ischemic heart disease is an important cause of premature death in the country, particularly in the Southeast region, which exceeds the national rate. The highest mortality rates from bronchial and lung cancer and chronic obstructive pulmonary disease were found in the Southeast region, also above the national average.

**KEYWORDS:** Noncommunicable Diseases; Mortality Premature; Air Pollution

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