

## Profile of Tuberculosis and Multidrug-Resistant Tuberculosis in Bahia: A Decade of Epidemiological Surveillance

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**Introduction:** Tuberculosis (TB) remains one of the leading causes of morbidity and mortality, especially in states with marked social inequalities, such as Bahia. The emergence of resistant strains (MDR-TB) represents an additional challenge for disease control due to prolonged treatment, greater drug toxicity, and high costs. The increased use of the Xpert MTB/Rif molecular test and the strengthening of epidemiological surveillance have contributed to the early detection of cases and monitoring of resistance. Thus, this study aimed to analyze the epidemiological distribution of TB and MDR-TB in Bahia between 2015 and 2024. **Methods:** This is a descriptive, time-series epidemiological study based on secondary data from the Notifiable Diseases Information System (SINAN). All TB cases reported in the state of Bahia between 2015 and 2024 were included. The variables analyzed included age group, sex, education level, health region, laboratory results (Xpert MTB/Rif and phenotypic test), and case closure status. **Results and Discussion:** The results confirm the expected epidemiological pattern of tuberculosis, with a higher concentration among adults aged 20 to 59 years, the most socially exposed group. The low occurrence in children and adolescents and the moderate incidence in the elderly reflect, respectively, lower exposure and greater immunological vulnerability. The higher frequency of cases among individuals with low education levels highlights the role of social determinants in the maintenance of TB, indicating that socioeconomic vulnerabilities continue to influence transmission and illness. The drop in notifications in 2020 reflects the impact of the COVID-19 pandemic on surveillance and diagnosis, with subsequent gradual recovery. The increased use of the Xpert MTB/Rif test contributed to greater diagnostic sensitivity and early detection of resistance, which remained low and stable throughout the period. Improved data completeness demonstrates a strengthening of surveillance routines. Phenotypic tests, while essential, remain limited by prolonged processing times, which can delay therapeutic decisions. **Conclusion:** TB in Bahia maintains an epidemiological pattern concentrated in adults, men, and individuals with low levels of education, with a strong influence of social determinants. The eastern region remains the main incidence center. The low occurrence of MDR-TB is a positive finding, but requires continuous surveillance given its therapeutic complexity. Improving data completeness and expanding the use of rapid tests strengthens the capacity for early detection and monitoring of resistance. The results reinforce the need for strategies targeted at vulnerable populations, improved surveillance, and the maintenance of integrated regional actions for disease control.

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