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## EPIDEMIOLOGY OF AR-BOVIROSES IN THE LAST 5 YEARS (2018-2022) IN THE MID-NORTHERN REGION OF BRAZIL

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#### INTRODUCTION

Arboviruses are the focus of public health studies in tropical and subtropical regions, due to the following causes: population growth, climate change, accelerated destruction of biomes, unplanned urbanization and the geographic expansion of the vector; as these factors contribute to the spread and permanence of arboviruses in the environment, causing a worrying spectrum of incidence.

#### OBJECTIVE

To analyze arboviruses in the last five years (2018-2022) in the Mid-North region of Brazil

#### METHODOLOGY

This is a descriptive epidemiological study, with a quantitative and qualitative approach, with a time frame of five (5) years. The information was obtained from the Notifiable Diseases Information System (SINAN) - DATASUS regarding cases of Dengue, Chikungunya and Zika Virus by year of notification in the states of Piauí and Maranhão in the period from 2018 to 2022. The variables analyzed were: range age, pregnant woman and sex. The data were organized and tabulated using Microsoft Excel software.

#### RESULTS

According to the data analyzed, a total of 5,630,275 cases of arboviruses (Dengue, Chikungunya and Zika Virus) were recorded in Brazil from 2018 to 2022, with 91,246 cases (1.62%) in the Mid-North Region. Of the cases in this region, 73.29% were Dengue, 23.28% Chikungunya and 3.43% Zika Virus. The year 2022 was the year with the highest incidence of all diseases, representing 58.01% of Dengue cases, 74.57% of Chikungunya cases and 54.85% of Zika Virus cases, already

the year with the lowest number of Dengue records were in 2018 with 6.16%, Zika Virus was in 2021 with 6.70% and Chikungunya was in 2020 with 2.56%. Regarding the age group, the most significant rate of cases was from 20 to 39 years old, with 24,934 total cases (37.30%) of Dengue, 7436 total cases (35%) of Chikungunya and 771 total cases (28.2%) of Zika Virus. The lowest incidence is aged 80+, with 669 cases (1%) of Dengue, 392 cases (1.84%) of Chikungunya and 14 cases (0.51%) of Zika Virus. It was noticed that in the three types of arboviruses, females had the highest number of cases, reaching 51,855 cases (56.90%), while males had 39,270 cases (43.09%). Finally, when observing pregnant women, it was observed that the highest number of cases was in the year 2022, with a total of 892 cases of Dengue, with the highest number of cases (62.89%), in relation to Chikungunya, a total of 463 cases were observed, with the highest frequency of cases (66.52%) and regarding Zika Virus cases, a total of 211 cases were observed, with the highest number of cases.

#### CONCLUSION

It can be deduced that the arbovirus with the highest incidence in the Mid-North Region, in the period from 2018 to 2022, was dengue, the sex with the highest prevalence was female and the age group with the highest incidence was 20 to 39 years; Furthermore, in the pregnant group, the highest number of cases of arboviruses was in the year 2022. It infers the need for public policies drawn up according to epidemiological data with consequent benefits for the population.

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