ABSTRACT

Trends in Dengue Cases in the Catchment Area of Kampung Bugis Public Health Center, Berau, 2022-2025

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Background : Dengue remains a public health concern. Local trend analysis can support the planning of prevention and control activities.

Objective : To describe annual and monthly dengue case trends, incidence rates (IR), and case fatality rates (CFR) in the catchment area of Kampung Bugis Public Health Center, Berau Regency, from 2022 to 2025.

Research Methods/ Implementation Methods : This retrospective descriptive study analyzed secondary dengue case records from Kampung Bugis Public Health Center for January 2022–December 2025. Annual and monthly cases were summarized descriptively. IR was calculated per 100,000 population using a fixed denominator of 32,366, the combined 2024 population for Gayam, Bugis, and Karang Ambun shown in profile Kampung Bugis. CFR was calculated as dengue deaths divided by cases, multiplied by 100%.

Results : A total of 345 cases were recorded during 2022–2025. Annual cases decreased from 142 in 2022 (IR 439 per 100,000), to 102 in 2023 (315), 78 in 2024 (241), and 23 in 2025 (71), an 83.8% decline. Monthly peaks occurred in July 2022 (22 cases), April 2023 (15), January 2024 (19), and March 2025 (6). CFR was 0% in 2022 and 2023, 1.3% in 2024 (one death), and 0% in 2025.

Conclusion/Lesson Learned : Dengue cases and IR declined over the study period, but cases continued to occur. Surveillance and prevention and control efforts in primary care and the community should continue.

Keyword : dengue; trend; incidence rate; case fatality rate; surveillance