

Epidemiology of Buruli Ulcer in Victoria, Australia 2017-2022

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Word Count (Max 250, excluding titles): 248

Background:

Buruli Ulcer (BU), caused by *Mycobacterium ulcerans*, is a neglected tropical disease that can cause a severe skin ulcer. BU remains endemic in sub-Saharan Africa and selected areas of Victoria, Australia.

Objectives:

Using surveillance data, this study highlights the current epidemiology of BU within Victoria and identifies factors that influence disease severity.

Methods:

All confirmed cases of BU from 2017-2022 in Victoria notified to the Department of Health were included. Age, sex, residence, WHO lesion severity (grade I least severe, grade III most severe), travel to endemic areas, and time of diagnosis and notification were collected. Predictors of disease severity were assessed using logistic regression and variables with a p-value <0.25 included in multivariate analysis.

Results:

There were 1751 cases of BU notified with 41% of all individuals aged over 60. Males were slightly over-represented (968, 55%). Just over half of the cases resided in established endemic areas (984, 56%), but an increasing proportion of cases were in new areas from 2020 to 2022 (7%-19%). The majority of cases were grade I (1301, 83%).

Multivariate analysis demonstrated risk factors for severe BU included being male, older age, residence in a new or non-endemic area and a longer diagnosis delay.

Conclusion:

The continued increase in BU cases demonstrates the progression from a localized disease in small geographic clusters to broader spread and emergence of endemic areas. This calls for continued targeted action, particularly for cases and clinicians in new endemic areas and populations at risk of severe disease.