

Outbreak of typhoid fever at Machang Moral Rehabilitation Centre, Kelantan

Zulaiha Idris¹, Mohd Azimullah Abdullah@Zakaria², Mohd Azizul Ahmad¹, Siti Mursyidah Abd Aziz³, Zolnaidi Zakaria³

¹Inspectorate Unit, Machang District Health Office, Machang, Kelantan, Malaysia, ²District Health Office Machang, Kelantan, Malaysia, ³Communicable Disease Control Unit, Machang District Health Office, Machang, Kelantan, Malaysia

ABSTRACT

Introduction: Typhoid fever remains a major public health concern worldwide, particularly in developing countries with poor sanitation and hygiene conditions. In Malaysia, the disease is endemic in certain states, including Kelantan. In 2022, an outbreak of typhoid fever occurred at the Machang Moral Rehabilitation centre, involving an inmate. An outbreak is declared in a detention centre although there is a single case detected in the centre. This report aims to provide an epidemiological analysis of the typhoid fever outbreak at the Machang Moral Rehabilitation centre, focusing on the timeline, affected individuals, and contributing factors. Additionally, effective control and prevention measures are proposed. **Materials and Methods:** A descriptive epidemiological study was conducted, involving case investigations, identification of close contacts, active case detection, laboratory analysis of clinical samples (blood culture and serological tests), and environmental assessments. **Results:** The outbreak started with a confirmed typhoid fever case on December 11, 2022, involving a 40-year-old male inmate who had been transferred to the Amanah Block at the Machang Moral Rehabilitation centre. Subsequent investigations, a total of 86 inmates have been screened including the food handlers and there was no identified individuals affected within the Amanah, Tabah and Serving Unit Blocks. The source of infection and risk factors were explored, and control measures were implemented to prevent further transmission. **Conclusion:** This report highlights the occurrence of a typhoid fever outbreak at the Machang Moral Rehabilitation centre in Kelantan. Timely identification, effective case management, and implementation of preventive measures are crucial to containing and preventing the spread of the disease in similar settings.