

## Food Poisoning Among Detainees in Tawau Sabah

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### **ABSTRACT:**

**Introduction:** The life of immigration detainees in detention centres should be considered essential to ensure their survival of detainees. Detainees suffering from conflict and poor health are vulnerable to various infections due to the deplorable environmental and social conditions in which they live. Among the important ones are the problem of infectious diseases and a healthy environment for detainees. Food poisoning is a disease that often occurs in detention areas when ingesting any hazardous substance, including viruses, bacteria, toxins or chemicals. Therefore, a healthy environment and good health is vital and needs to be taken seriously by detainees and stakeholder.

**Methodology:** Tawau Area Health Office reported fifty detainees with Acute Gastroenteritis in the Tawau Immigration Detention Centre. The case was defined as any detainees with a history of ingesting food or drinks from 11th May 2022 and developed acute onset of vomiting, diarrhoea, abdominal pain and fever. Active case detection and passive case detection were done. A standard questionnaire was derived from Borang Siasatan Kes Keracunan Makanan, Kementerian Kesihatan Malaysia, to obtain demographic, clinical, and nutritional history during incubation. Such data are needed to identify the causes of the outbreak and the factors contributing to the food poisoning outbreak. Inspections of environmental health are made by conducting inspections on food premises where food poisoning incidents arise. Environmental investigations also involve food safety analysis activities using the HACCP method and food detention activities under the Food Act 1983. To determine the etiological agent of the cause of the KRM outbreak, the types of clinical samples that were taken include; stool specimens for culture and sensitivity for pathogenic Enteric analysis. Case specimens and proxy food samples or holding samples were taken at the premises for testing for pathogenic microorganisms' presence.

**Results:** This time, the food poisoning outbreak involved a total of 291 cases with an attack rate as high as 12.3%, all of whom were detainees residents of the Tawau Immigration Detaining Centre. The type of infection in this outbreak is a continuous common source. A total of 15 out of 90 clinical samples of food poisoning cases showed positive results with a different pathogen, namely *Shigella* spp. (11%), *E. coli* (3%), *Salmonella* spp. and *Aeromonas hydrophila* (1%). One clinical sample of food handlers was detected positive for *Salmonella* spp. The presence of *E. coli* was also detected in two food proxy samples, three food handler hand swab samples and water samples in the reservoir from 3 blocks, Block 1, 9 and 10.

**Discussion/Conclusion:** *E. coli* was considered the causative agent of this food poisoning outbreak. Improper handling of food and water supply interruption was the most important actors causing the outbreak.

**KEYWORDS:** Food Poisoning, Detention Centre, Tawau, Sabah