

INVESTIGATION ON DISEASE FOODBORNE OUTBREAK IN TEPUS, GUNUNGKIDUL, YOGYAKARTA, INDONESIA

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ABSTRACT

Background: On 6th September 2022, Gunung Kidul Health office reported a large number of food poisoning in Sidoharjo, Tepus, Gunung Kidul, Yogyakarta area after receiving food from a traditional event. This study aimed to investigate an outbreak in Sidoharjo, Tepus, Gunung Kidul, Yogyakarta, assess the extent of the outbreak, identify the contributing factors and make a recommendation for control measures.

Subjects and Method: A retrospective cohort study was conducted in Sidoharjo, Tepus, Gunung Kidul, Yogyakarta, in September 2022 for an outbreak investigation. Retrospectively a total of 76 people who received the food were identified and selected for this study. The dependent variable was food poisoning. The independent variables were types of food served at the party, including fried chicken, marinated tempe and tofu, fried vermicelli noodles, and stir-fried of tempe. Food sample was sent to a public health laboratory. Food hygiene practice was observed. Attack Rate for each type of food was calculated. The relationship between diarrhea and the suspected was analyzed by chi-square with Risk Ratio (RR).

Results: A total of 46 (76.7%) cases were identified among 60 people. As many as the main symptoms were diarrhea (95.65%), stomachache or tight stomach (86.96%), headache (34.78%), and nauseous (10.87%). Among all food served, fried chicken had the strongest association with the illness (RR= 1.35; CI=0.87 to 2.07; p= 0.150) and stir-fried of tempe (RR= 1.29; 95% CI= 0.76 to 2.16; p= 0.299). Staphylococcus aureus and Klebsiella pneumoniae was suspected to be the etiologic agent.

Conclusion: Foodborne outbreak in Sidoharjo was confirmed. Eating fried chicken and stir-fried of tempe was the primary source of the current outbreak.

Keywords: foodborne, illness, outbreak, diarrhea.

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