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ABSTRACT

Title of Abstract : Investigation of Food Poisoning Outbreak in X Senior High School in

Bantul District, Indonesia 2024

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Background: On 7th October 2024, the Bantul District Health Office received reports that students, parents, and teachers at X Senior High School were sick with similar symptoms, suspected after consuming food at the "Character Strengthening" activity.

Objective: This investigation aimed to confirm and describe the outbreak for control measures.

Research Methods: Active case finding and a 1:1 case-control study were conducted. Cases were defined as people who experienced gastrointestinal symptoms after consuming food during the event on 6th October 2024. Data on characteristics, food consumption, and environment were collected using a questionnaire via Google Forms. Food samples were tested at BLKK Yogyakarta laboratory. Data were analyzed descriptively and statistically (chi-square).

Results: Of 150 people, 91 (60.67%) were identified as cases. Cases were 80.22% female, 60.44% aged 10-18, and 56.04% students. The majority of symptoms were diarrhea (80.22%), abdominal pain (59.34%), and weakness (26.37%). The outbreak occurred on 6th-7th October 2024, with an average incubation period of 10.35 hours (1.00-21.55 hours). Stir-fried chicken gizzards and liver had the highest risk, students who consumed this food were 6.4 (95% CI: 2.1-23.3) times more likely to become cases. Improper cooking processes and poor hygiene practices were identified as risk factors. Laboratory tests confirmed Bacillus cereus in the Stir-fried chicken gizzards and liver.

Conclusion: There was a food poisoning outbreak in X Senior High School on 6th-7th October 2024 caused by Stir-fried chicken gizzards and liver contaminated by Bacillus cereus. Improper cooking processes and poor hygiene cause contamination. The food handler's knowledge of hygiene and sanitation during cooking needs improvement.

Keyword: Foodborne disease, food poisoning, Bacillus cereus