

An Investigation on a Food Poisoning Outbreak Linked to a Catering Lunch Served in Three High Schools, New Taipei City, 2019

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Abstract

On September 11, 2019, a food poisoning outbreak occurred in three high schools in New Taipei City after students consumed a catering lunch supplied by catering company X. Results of the retrospective cohort investigation showed a total of 103 students, who consumed the lunch, met the case definition, indicating an attack rate of 20.4% (103/504). The main symptoms comprised abdominal pain and diarrhea. The median incubation period was 16 hours, with a range of < 1 to 24 hours. An analysis of the lunch dishes determined the KungPao drumsticks as the food item responsible for the food poisoning outbreak (adjusted relative risk: 3.69; 95% confidence interval: 1.41–9.65). Stool samples from four ill students were found positive for the causative pathogen, *Clostridium perfringens*, and its toxin gene *cpa* and enterotoxin *cpe*. To avoid any recurrence of *Clostridium perfringens*-induced food poisoning from the KungPao drumsticks, the catering company should cook the dish at a temperature of 74°C or above and keep the food warm at least at 60°C afterwards. The food should also be consumed as soon as possible within 2–4 hours after cooking.

Keywords: Food poisoning, *Clostridium perfringens*, cohort study, catering lunch

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