

Clostridium perfringens Outbreak Associated with School Lunch, New Taipei City, 2019

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Abstract

In September 2019, an outbreak of gastroenteritis occurred in three schools in New Taipei City. More than 200 students became ill after eating school lunch provided by the same caterer on September 3. Using a semi-structured questionnaire, food consumption in school lunch was assessed. Of 562 respondents with complete data, 182 met the case definition. Main symptoms included diarrhea and abdominal pain, with median incubation period of 15 hours. In univariate and multivariate analyses, consumption of braised chicken was associated with illness. Bacteria of *cpe*-positive *C. perfringens* were detected in 10 of 16 stool samples among 16 cases. Environmental investigation indicated inadequate cooking and storage procedures might have contributed to food contamination. We recommended that caterers should strengthen the implementation of the Hazard Analysis and Critical Control Points principles and schools should contract caterers complying with food safety standards (e.g. food can be served within two to four hours after cooking).

Keywords: Outbreaks, *Clostridium perfringens*, school lunch, foodborne disease

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