

Norovirus Outbreak in An Educational Center—Taoyuan, Taiwan, January 2018

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Abstract

On January 19th, 2018, over 90 of 142 seminar attendees suffered from gastroenteritis after a lunch provided by an educational center in Taoyuan. All participants ate the same kind of lunch box and fruit box at the time. Taiwan Centers for Disease Control conducted an epidemiological investigation to identify the scale of the outbreak, pattern of spread, implicated food and causative pathogen. We defined the cases as attendees of the seminar who had eaten the foods provided by the seminar and had 2 or more of symptoms, including abdominal pain, diarrhea, vomiting or fever, after 6pm on January 19th. Of 140 participants enrolled in the investigation, 72 (51.8%) met the case definition. The epidemic curve revealed a point source exposure. Median incubation period was 22 hours (range 12–67 hours). We conducted a cohort study and the results showed that illness was associated with eating pears (hazard ratio 3.9, 95% confidence interval 1.0–16.1). Stool specimens from 3 ill participants were positive for norovirus. The food worker washed the fruits with unchlorinated and unboiled underground water, and prepared the fruits with bare hands. We recommended practicing proper hands hygiene when handling fruits, and using water met the drinking water quality standard to wash fruits.

Keywords: Gastroenteritis outbreak, foodborne outbreak, norovirus, cohort study

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