

Outbreak Investigation Express

Investigation of Acute Diarrhea Outbreak among Taiwanese Group Tourists in Korea, December 2013-January 2014

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Abstract

From late-December 2013 to mid-January 2014, a cluster of acute gastrointestinal illness occurred in 25 Taiwanese tourist groups traveling to Korea. Among 650 persons, 370 (attack rate 56.9%) experienced nausea or vomiting during the tour. Review of the itineraries demonstrated that 24 groups had patronized to Restaurant X 1–2 days before onset of illness. We conducted a case-control study in five groups through a questionnaire survey to determine the associated food items. A case was defined as onset of diarrhea or vomiting within 72 hours after patronizing Restaurant X, and the rest unmet for case definition were controls. Among 123 surveyed tourists, 71 (57.7%) completed the questionnaires and 55 (77.5%) met the case definition. The median incubation period was 25 hours (range 5–59). No specific food item was significantly associated with illness. Of 44 stool samples from Taiwanese tourists, 18 were positive for norovirus. Environmental investigation implemented by Korea authorities revealed two food handlers at Restaurant X tested positive for norovirus. Based on the epidemiological investigation and laboratory results, norovirus outbreak was confirmed. Taiwan Centers for Disease Control had implemented preventive measures include promoting hand hygiene towards tourists and advising the Traveling Agent Association against patronizing Restaurant X. This investigation highlights the importance of prompt cooperation of travel industries and international collaboration.

Keywords: diarrhea, outbreak, norovirus