

Epidemiological investigation of a cluster diarrhea event among guests in
a wedding party caused by *Vibrio parahaemolyticus*

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On November 26, 2006 around 10 pm, around 100 people started to have symptoms of food poisoning, including nausea, vomiting, abdominal pain, and diarrhea, after eating lunch in a wedding party in a restaurant in Taipei County. An epidemiological investigation was conducted to estimate extent of this cluster food poisoning event, the pathogenic cause, the food item responsible and the reason behind the food contamination. Semi-structured questionnaires were used to interview 83 guests over the phone. Among them, 60 (72.3%) were found to be compatible with the case definition of food poisoning. The gender ratio was 2:3 (male to female), and the ages were between 5 and 68. The incubation period was between 4 and 63 hours, with a median of 13 hours.

Although *V. parahaemolyticus* could not be identified in residual food items and environmental specimens, 18 of the 19 diarrhea patients had *V. parahaemolyticus* identified in their anal swabs. One of the two stool samples was also positive for *V. parahaemolyticus*. *V. parahaemolyticus* was hence identified as the pathogen of this event. After examining the environment of the restaurant and food, Japanese sushi with seafood was likely the causal dish of this event. The cause of this event could be insufficiently low temperature in the refrigerator. Prolonged talks given by guests of honor in the party caused the sushi to be left out at room temperature in the hot kitchen for one hour without refrigeration. Under such circumstances, *V. parahaemolyticus* could proliferate to intoxicating doses on Japanese sushi with seafood.

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