

Outbreaks of Food Poisoning among guests at a Wedding Party in Sakawayana Village, Garut Regency, Indonesia.

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Background

On March 6th, 2018 the Health Office of Garut Regency received a report of a food poisoning outbreak in Sakawayana Village allegedly due to "*Besek*" (box containing several food items) given by the wedding party host to guests. We conducted an investigation to identify the source and risk factors for the food poisoning outbreaks.

Methods

We did a retrospective cohort study. Wedding guests who ate items from the *besek* were interviewed using structured questionnaires to ascertain food exposures and symptoms. Cases were persons who ate food items contained in the *Besek* on March 5th, 2018 with one or more symptoms such as diarrhea, dizziness, fever, nausea, abdominal pain, vomiting, heartburn, and seizures. We conducted a sanitary inspection of kitchen area where foods were cooked. Food samples were collected and sent to a laboratory. Interviews of food handlers and wedding host were done.

Results

Of 537 persons interviewed, were 315 (58.66%) became ill. The symptoms were diarrhea (82.22%), dizziness (78.41%), fever (77.46%), nausea (76.19%), stomachache (65.08%) and vomiting (58.73%). Incubation period ranged from 0.5-53 hours (mean 16). The suspected source of food poisoning was vermicelli stir-fry (OR = 1.64, 95%CI = 1.34-1.99). Laboratory examination revealed that vermicelli was positive *Staphylococcus aureus*. The food was cooked outside the house. There was poor sanitation in the area with goat cage nearby. The food items were cooked and packaged by a home cook and several food handlers.

Conclusion

Based on laboratory examination and clinical symptoms, the food poisoning was possibly caused by eating vermicelli stir fry contaminated with *Staphylococcus aureus* toxin. Contamination may have been facilitated by poor hygiene of food handlers and poor sanitation in the cooking area. Health workers should educate caterers or home cooks on safe food handling to ensure food safety during wedding parties.

Keywords : outbreaks, food poisoning, *Staphylococcus aureus*