

Foodborne Gastroenteritis in a Junior High School – Nantou County

On April 10, 1985, an outbreak of gastroenteritis occurred among students in a junior high school in Nantou County. Ill persons developed symptoms after eating two

suspect meals (lunch and dinner) on April 9 prepared by the school's dormitory kitchen. The largest number of cases had onset of illness during the early morning hours of April 10, approximately 12 hours after the evening meal and 18 hours after the noon meal (Figure 1). Of 121 persons who ate in the cafeteria on April 9, 89 (86 students, two teachers, and one cook) became ill for an attack rate of 73.6%. Symptoms included diarrhea (85%), abdominal cramps (80%), nausea and vomiting (40%). Six cases (5%) reported fever. Eight were given intravenous fluids and 67 received antibiotic therapy. The duration of illness was 1-2 days.

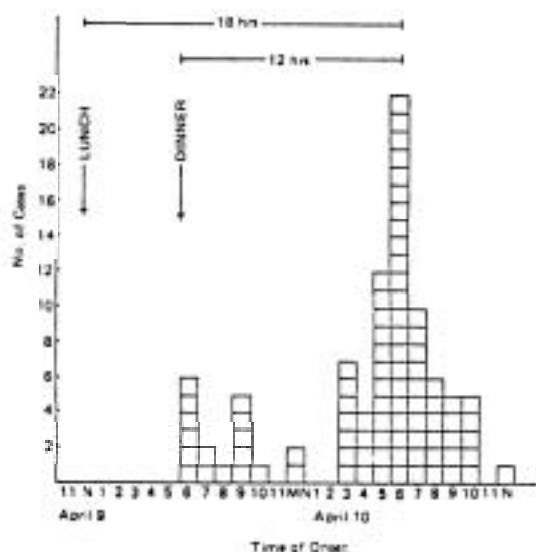
A food history questionnaire was completed by all persons who ate in the cafeteria on April 9. Two food items, eggplant ($p < 0.01$; Chi square) and soya-mixed pork ($p = 0.068$; Fisher's Exact Test), were associated with illness. Only the pork was served at both meals. A review of food handling techniques revealed that the pork was cooked on April 8 and then allowed to stand at room temperature for more than 20 hours before it was consumed.

Rectal swabs from 70 ill persons were negative for *Salmonella* and *Vibrio cholera*; however, most were collected from persons who had already been treated with antibiotics. No food items were available for laboratory examination.

Reported by the Nantou County Health Department and the Bureau of Disease Control, Department of Health, Executive Yuan.

Editorial note: Although no specific etiologic agent was identified in this outbreak, unrefrigerated cooked pork was probably the vehicle of transmission. Proper food handling practices are essential in preventing outbreaks of gastroenteritis, and local County

Figure 1. Cases (N=89) of Gastroenteritis by time of onset, Nantou County, April 9-10, 1985.



Health Bureaus should routinely inspect food establishments and ensure that the food handling guidelines prepared by the Bureau of Food Sanitation are followed.

This is the third outbreak of gastroenteritis investigated by the Bureau of Disease Control (BDC) this year.^{1,2} In none of these outbreaks, was the BDC directly notified by the County Health Bureau or local health station. By the time investigators arrived on the scene, many persons could not remember what they had eaten, no food or patient specimens were available for laboratory testing, and the cause of the outbreak could not be well defined. To improve future outbreak investigations, the Department of Health again urges local and county health authorities to notify the Bureau of Disease Control *immediately* by telephone (TEL: 02-712-3781) when outbreaks of *any* illness occur. In the case of possible foodborne outbreaks, the guidelines published in the March issue of the *Epidemiology Bulletin* should be followed until investigators from the BDC arrive.²

References

- 1 Department of Health. Outbreak of gastroenteritis among students of two senior high schools - Tainan County Epidemiol Bull (R.O.C.) 1985; 1: 11,14-5
- 2 Department of Health. Gastroenteritis at a wedding party - Nantou Epidemiol Bull (R.O.C.) 1985; 1: 30-2.

To strengthen the surveillance system and enrich the content of the *Bulletin*, we welcome accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest. Articles for publication and requests to be placed on the mailing list should be sent to: the Editor, *Epidemiology Bulletin*, Bureau of Disease Control, Department of Health, the Executive Yuan, Republic of China, P. O. Box 81-95, Taipei, Taiwan, R.O.C., TEL: (02) 7123761.

Director-General, Department of Health

Tzu-Chiu Hsu, M.D.

Director, Bureau of Disease Control

You-Tseng Kuo, M.D., M.P.H.

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REPUBLIC OF CHINA
EXECUTIVE YUAN
DEPARTMENT OF HEALTH
BUREAU OF DISEASE CONTROL
P O BOX 81-95 TAIPEI, TAIWAN, R O C.
TEL: (02) 7123761

