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CHRISTMAS PARTY RESULTS IN EXCHANGE OF UNWANTED PRESENTS - SHIGELLA

On December 23, 1984, a neighborhood party was held in Eagle River, attended by 35 members of 9 families. Of the 35 individuals who attended, 2 were ill prior to the party, leaving 33 at risk (Figure 1). Of these 33, 21 (64%) met our case definition of probable shigella: diarrhea for at least 2 days after eating at the party and/or laboratory confirmed shigella. The 19 individuals who became ill after the party exhibited the following symptoms: diarrhea (100%), abdominal cramps (84%), gas (53%), fever (37%), mucus in the stool (32%), chills (32%), headache (32%), vomiting (11%), bloating (5%), bloody diarrhea (5%). The range for the duration of symptoms was 2-12 days with a mean duration of 6.6 days.

Food was prepared by each family and served potluck style. The party began about 4:30 p.m. Food was placed on the serving counter as it arrived. Some food was placed in the refrigerator until it was time to eat. Most people arrived by 6:30 p.m., and dinner was served. There was no snacking prior to the dinner. However, guests did snack on several foods, including desserts, after dinner. 23 food items, including 6 beverages were served. No ice was used. No foods were available for testing.

Analysis of food specific attack rates (statistical analysis by Fisher's Exact Test) implicated at least 2 foods $\frac{3}{4}$ eggnog ($p = 0.005$) and caramel corn ($p = 0.039$). Interestingly enough, individuals who drank beer had significantly less illness ($p = 0.01$). No other common event was shared by all individuals.

Stool cultures were obtained from 30 of the 35 people who attended the party plus 3 additional samples from family members who did not attend the party. Of the 14 who were not ill, 12 were tested; 2 individuals, an asymptomatic child, and another child with diarrhea for only 1 day, were culture positive. The 2 individuals ill prior to the party were both laboratory confirmed. One of the two, an infant, had intermittent diarrhea for several months. Family members who did not attend the party were all laboratory negative for shigella.

This common source outbreak of shigella resulted in an unusual symptom complex among those affected. Only seven of 19 individuals who were ill had fever, and only 1 individual had a bloody stool. Shigella was also found in an asymptomatic child. Of 33 individuals who ate at the party, 21 became ill or were laboratory positive. Two foods were significantly associated with illness $\frac{3}{4}$ eggnog and caramel corn. Two individuals who were ill before the party were lab positive for shigella and may have been the source of the outbreak. All ill individuals were treated with antibiotics and recovered uneventfully.

**Figure 1. Shigella Outbreak, Eagle River
December, 1984**

