Par for the Course: Outbreak of Shigella flexneri at a Golf Tournament—Maine, 2005

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Shigellosis is a diarrheal illness requiring few organisms for transmission. An average of 9 cases/year were reported in Maine during 2000-2004. Maine State Health Department was notified of a positive Shigella culture 9/12/05. Reportedly >11 persons became ill after participating in a golf tournament held in Maine and catered by New Hampshire establishment on 9/1/05.

METHODS

**Case Finding**
- Attendee: Any guest, volunteer, or employee who participated in any part of the golf event
- Obtained list of attendees from event organizer
- Interviewed attendees
- Asked persons interviewed to identify other attendees

**Case Definition**
- >3 loose stools in an attendee during 24-hour period ≤4 days following event

**Laboratory Analysis**
- Stool specimens requested from:
  - Symptomatic individuals
  - Employees of golf course and caterer
- Specimens cultured, serotyped, and tested by pulsed field gel electrophoresis (PFGE)
- Antibiotic susceptibility testing done on cultures
- Water samples from golf course tested for coliforms

**Environmental Investigation**
- Golf facility inspected by Maine Health Department sanitarians
- Catering establishment inspected by New Hampshire Health Department sanitarians
- Site visits to both facilities by Maine epidemiologists

**RESULTS**

117 (91%) of 128 attendees were interviewed
- 92 guests
- 13 volunteers
- 12 employees
- Median age 49 years (range 8 – 88 years)
- 49 cases (attack rate 42%)
- 18 (37%) persons sought medical attention
- 1 (2%) hospitalized

**Most common symptoms:**
- Diarrhea n = 49 (100%)
- Bloody stool n = 19 (39%)
- Vomiting n = 13 (27%)

**Laboratory Findings**
- Four stool specimens from guests were positive for Shigella flexneri
- PFGE revealed indistinguishable patterns
- Isolates were sensitive to drugs commonly used to treat shigellosis, except for Trimethoprim-Sulfamethoxazole
- Water samples revealed 1 cooler (+) for coliforms

**Environmental Findings**
- Inspection of golf course food services revealed 2 critical violations
- Inspection of catering establishment found 2 critical violations and 11 other violations

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