



Bulletin No. 22

July 1, 1996

Gastroenteritis Strikes Tour Group

On June 17, 1996, an alert clinician notified our office of gastroenteritis among 16 of 38 members of a tour group which had arrived by train from Fairbanks at Denali National Park. The tour group sailed from Vancouver, British Columbia on June 8 on a cruise ship. On June 12 they began their travel by bus, train and boat from Skagway through Whitehorse and Dawson, Yukon Territory, and Eagle, Tok, and Fairbanks, arriving at Denali on June 17.

RESULTS Of 38 people, 20 (53%) met a case definition of vomiting or diarrhea with onset after June 8. Symptoms for the 20 cases included nausea (75%), vomiting (75%), diarrhea (55%), abdominal cramping (50%), fever (25%), and headache (25%). Cases occurred between June 14 and June 18 (Figure). The incubation period for this agent was 24-48 hours.

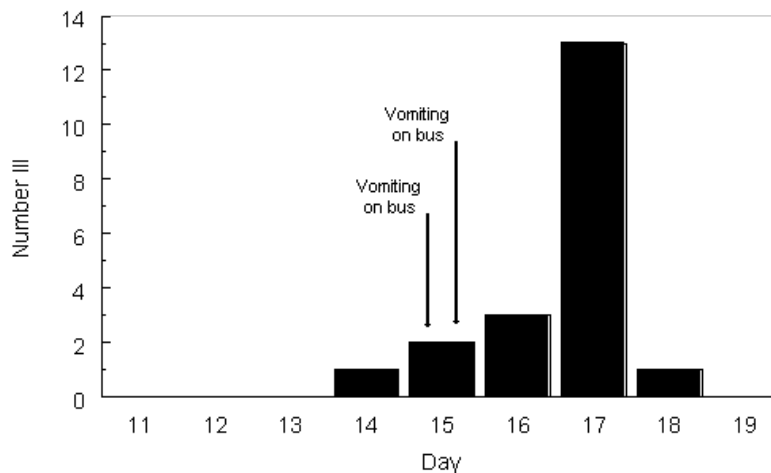
Case 1 became ill and vomited while in his hotel room. Cases 2 and 3 became ill during the next day while enroute from Dawson to Tok via a boat and two bus rides. Case 2 vomited in the hotel shuttle bus enroute to the boat, and case 3 vomited in the bus between Eagle to Tok. The eight hour Eagle to Tok bus ride had only one stop at Chicken, Alaska; the bus toilet was the only available toileting facility. Within the next two days, 17 others became ill. At least 11 (65%) of the 17 persons who subsequently became ill sat in the back of the bus (close to the toilet where case 3 vomited) or used the toilet after case 3 vomited in it.

No illness was reported among persons traveling the opposite route nor among the subsequent tour group to Denali. We had previously received reports of sporadic cases of similar illness among other tour groups. The Centers for Disease Control and Prevention (CDC) investigated similar illness on a cruise ship earlier this month. Denali resort staff had been ill during the last several weeks. The Yukon Territory health officer also reported that illness compatible with a Norwalk-like agent occurred in Whitehorse over a month ago.

Three stool samples from ill persons, including one person from this bus, which were negative for enteric bacteria, were sent to CDC for testing for virus.

Tour Group Illness, June 14 - 18, 1996

N=20



DISCUSSION The cluster of cases among this tour group which occurred during the 24-hour period beginning at noon on June 16 indicated a point source epidemic. Based on a 24-48 hour incubation period, cases 1-3 were most likely exposed to a common source. Subsequent cases were exposed on one or both of the bus rides on June 15 where cases 2 and 3 vomited. The incubation period, symptom complex, and high attack rate suggest a Norwalk-like virus as the most likely agent.

Reports of illness among members of other tour groups, on cruise ships, in Whitehorse, and among Denali staff suggest that a Norwalk-like virus was circulating in Alaska. Because Norwalk-like viruses are highly infectious, the possibility of common source outbreaks is high. Measures to reduce the chance of such an outbreak include early identification and reporting of illness in tour groups, meticulous attention to sanitation (especially prompt cleaning after episodes of vomiting), and an emphasis on handwashing by staff and tour group members.

RECOMMENDATIONS**Tour Operators:**

1. All tour operators should provide motion sickness bags for each bus seat and set up procedures for the bus to stop, if possible, for tour members to vomit **outside** the bus. Tour guides should inform tourists that motion sickness bags are available and that the bus driver will stop, if possible, to enable an ill passenger to temporarily get off the bus.
2. Tour operators should train staff and provide adequate sanitation materials (clorox, wipes, gloves) for immediate cleanup of vomit on buses, boats or trains.
3. Tour operators should review foodhandling and handwashing procedures with staff. Ill staff should not work in a food preparation or food handling capacity. Tour operators should develop policies which allow ill staff to take leave without losing pay.

Health Care Providers:

4. Health care providers who evaluate ill tourists should obtain a bulk stool (preferably) or vomitus specimen from the ill person.

Specimens should be refrigerated. Shipment of specimens should be arranged with our office at the number below.

5. Health care providers should promptly report all cases of gastrointestinal illness among tourists.

Tourists:

6. Tourists should inform their tour guide or bus driver if they become ill. Frequent handwashing, especially after toileting and before every meal or snack, is the best way to prevent spread of this illness.

7. Tourists who become ill with vomiting or diarrhea should drink plenty of fluids to remain well hydrated.

Reports of gastrointestinal illness among tourists (particularly vomiting on a bus, boat, or train) should be reported immediately to our office at 1-907-269-8000 or 1-800-478-0084 (after hours).

(Reported by Lyndsay Roberts, PA, Healy Clinic. We thank Kim White, RN, McKinley Chalet Resorts, Carol Linkswiler, DEC-Fairbanks, and the tour company for their help with this investigation. Submitted by Sue Anne Jenkerson, RNC, MSN, FNC and Sherry Kew, RN, BSN.)