



Bulletin No. 9

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Influenza A among Summer Tourists in Alaska - 1999

The influenza season has, until recently, been confined to October through mid-May in North America. During the summer of 1998, an outbreak of influenza A/Sydney/5/97 (H3N2)-like virus occurred among travelers to Alaska. Between May 1 and August 22, 1998, 766 cases of influenza-like illness or ILI (fever or feverishness with cough or sore throat) were identified, with 71 cases of radiographically confirmed pneumonia and 50 hospitalizations. In addition, two deaths occurred that might have been related to this outbreak.¹ Some evidence suggested that transmission was occurring during overland tours, although cruise ship transmission was also documented. The outbreak, a one-time anomaly at the time, occurred during the peak travel season when 60,000-70,000 travelers arrived weekly in Alaska.

In early June 1999, we began to receive reports of ILI among travelers to Alaska. As of June 29, CDC received reports of 428 cases of acute respiratory infection (ARI) among tourists to Alaska and the Yukon. Among 386 cases whose dates of illness onset are known from 10,110 passengers with a 7-day travel itinerary, the ARI incidence was 3.8 percent.

Cases A and B: On June 3, 1999, the infection control practitioner at Ketchikan General Hospital reported a 55-year-old traveler who was hospitalized with bronchopneumonia. She had arrived in Anchorage on May 25 to begin a land-based tour with her husband. They traveled by train to Denali and Fairbanks, flew to Anchorage, and then boarded a ship in Seward for Vancouver, BC. Case A developed fever, malaise and cough on May 28, just before boarding the ship. Her husband, Case B, developed the same symptoms 2 days later. Case B had a positive rapid influenza A antigen-detection test and both were started on rimantadine. Although her husband quickly improved, Case A developed worsening cough and required hospitalization. Neither had received the 1998-99 influenza vaccine. Influenza cultures taken on June 3 were negative.

Cases C and D: On June 14, 1999, an Anchorage physician reported two travelers, ages 64 and 65, with positive rapid influenza A antigen-detection tests. Both were hospitalized on June 8 in Anchorage. These individuals, husband and wife, began their trip on May 29 with a cruise from Vancouver, BC to Skagway. They then traveled through the Yukon Territory to Fairbanks, and took the train to Denali and Anchorage. They were preparing to fly home when both developed fever and severe cough. Neither had received the 1998-99 influenza vaccine.

Case E: On June 15, 1999, the infection control practitioner at Ketchikan General Hospital reported three cruise ship passengers were hospitalized with pneumonia. A respiratory specimen from one individual was positive for influenza A by rapid antigen testing and culture. Case E, an 80-year-old man, arrived in Anchorage on June 6, and traveled by train to Denali and Fairbanks. He continued to Whitehorse by bus, to Skagway by train, and boarded a southbound cruise ship on June 13. He developed fever, malaise, cough and nausea the following day. Case E received influenza vaccine in the fall of 1998.

Case F: On June 18, 1999, the Public Health Laboratory-Fairbanks reported a positive influenza A culture from a 64-year-old traveler seen at Healy Clinic on June 11. Case F began a cruise northbound from Vancouver on May 31. She arrived in Seward on June 7, and traveled to Anchorage on June 9 where she developed headache, myalgias, feverishness and cough. She took the train to Denali and sought health care at the Healy Clinic. Treatment included azithromycin and amantadine. She rapidly improved and completed her itinerary in Fairbanks on June 12. She had received an influenza immunization in October 1998.

Discussion: To date, influenza has occurred in travelers who have been present in Alaska or the Yukon Territory at least 2 days before onset. The incubation period for influenza A is 1-3 days, suggesting that transmission is occurring in Alaska, and in one case, the Yukon Territory.

Four isolates have been identified as **influenza A/Sydney/5/97 (H3N2)-like virus**. This strain was included in the 1998-99 influenza vaccine and will be in the 1999-2000 vaccine. **Currently no influenza vaccine is available in the United States.**

Alaska 1998-99 influenza season: The last known influenza A isolate for the 1998-99 season in Alaska was reported on April 10, 1999. During late April, sporadic influenza B was seen and the last isolate detected on May 4, 1999.²

Sentinel sites: To identify influenza activity among Alaska summer visitors, nine health care facilities are participating as sentinel surveillance sites.

- Providence Alaska Medical Center, Anchorage
- Alaska Regional Hospital, Anchorage
- Providence Seward Medical Center
- Healy Clinic
- Fairbanks Memorial Hospital
- Valdez Community Hospital
- Skagway Medical Clinic
- Bartlett Regional Hospital, Juneau
- Ketchikan General Hospital

Influenza culture materials are available from the Public Health Laboratories in Fairbanks (907-474-7017) and Anchorage (907-274-1602).
Influenza cultures are free of charge.

Recommendations:

1. Consider the diagnosis of influenza in visitors to Alaska presenting with fever or feverishness and cough or sore throat.
2. When possible, collect nasopharyngeal or throat swabs for influenza culture or rapid antigen testing within 48 hours of symptom onset. Specimens from a few individuals in a group of travelers with similar symptoms will be

diagnostic for all.

3. Consider treatment with amantadine or rimantadine for Alaska travelers who present with influenza-like illness, regardless of vaccine history. These agents are effective in reducing both the duration of illness and viral shedding when initiated within 48 hours of symptom onset.

Other sources of information:

CDC. Preventing influenza infection among travelers at <http://www.cdc.gov/travel/feb99.htm>.

CDC. Questions and answers about preventing influenza infection among travelers at <http://www.cdc.gov/travel/qa22-3.htm>.

CDC. Outbreak of influenza A infection among travelers - Alaska and the Yukon Territory, May-June 1999. MMWR 1999;48:545.

References:

1. CDC. Update: outbreak of influenza A infection - Alaska and the Yukon Territory, July-August 1998. MMWR 1998;47:685.

2. Alaska Influenza Surveillance Report at <http://www.epi.hss.state.ak.us>

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