



Bulletin No. 19
December 16, 1999

Influenza A among Summer Tourists in Alaska - 1999: Final Report

Widespread influenza A activity was first documented among tourists to Alaska during the summer of 1998.¹ In June 1999 we again identified influenza A among tourists traveling through Alaska or the Yukon Territory.² To determine the extent of influenza among summer travelers to Alaska, between June and September 1999, selected health care facilities throughout Alaska served as sentinel surveillance sites. Tourists presenting with influenza-like illness (ILI), defined as fever with cough or sore throat, were evaluated by viral culture or rapid influenza antigen testing. Several other health care facilities also submitted specimens for influenza testing during the summer.

Results: From May 31 through September 30, 1999, 16 health care facilities reported 137 laboratory-confirmed cases of influenza A (Table 1).

Table 1. Laboratory-confirmed influenza

Location	Health Care Facility	Laboratory Method		Total
		Rapid Antigen-detection	Culture	
Anchorage	First Care, Spenard		1	1
Anchorage	Alaska Regional Hospital	41	3	44
Anchorage	Providence Alaska Medical Center	27		27
Cordova	Cordova Community Medical Center		1	1
Fairbanks	Fairbanks Memorial Hospital		3	3
Glennallen	Cross Roads Medical Center		1	1
Healy	Healy Clinic		11	11
Homer	South Peninsula Hospital		1	1
Juneau	Bartlett Regional Hospital		24	24
Ketchikan	Ketchikan General Hospital	4	6	10
Seward	Providence Seward Medical Center		4	4
Sitka	SEARHC Mt. Edgecumbe Hospital		1	1
Skagway	Skagway Medical Services		1	1
Talkeetna	Sunshine Community Health Center		3	3
Tok	Tok Clinic		1	1
Valdez	Valdez Community Hospital & Clinic		4	4
TOTAL		72	65	137

Laboratory confirmation: Two laboratory methods were used to identify influenza virus: viral culture and rapid antigen detection. Of 137 confirmed influenza cases, 65 (47%) were confirmed by culture and 72 (53%) by rapid antigen detection. Of the 65 influenza A isolates, 42 have been subtyped to date: all were subtype A/Sydney/05/97 (H3N2)-like.

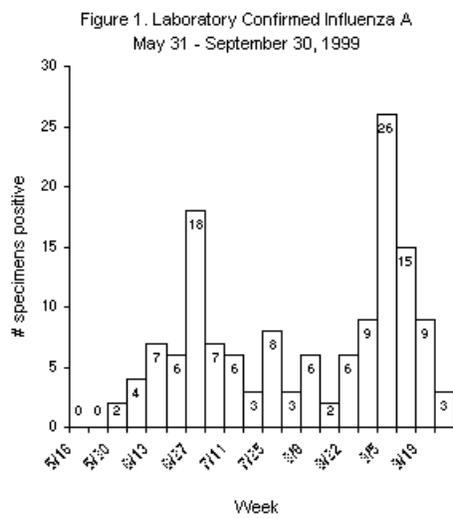
Pneumonia: Information about the presence of pneumonia was available for 131 cases. Thirty-five (27%) individuals had pneumonia at the time influenza was diagnosed. Twenty-nine (83%) of 35 persons with pneumonia were hospitalized.

Hospitalization: Information about hospitalization was available for 134 cases. Forty-nine (37%) individuals were hospitalized at the time of evaluation for ILI. Twenty-seven (55%) of those hospitalized had evidence of pneumonia.

Tourist versus Alaska resident: The place of residence was known for 134 cases. Ninety-seven (79%) persons with influenza A were tourists traveling through Alaska. Twenty-six (21%) Alaska residents were confirmed to have influenza. Three Alaska residents worked in the tourism industry, but this information was not available for most Alaska cases.

Age: The median age for tourists with influenza was 69 years. The median age for Alaska resident cases was 52 years.

Duration of influenza A activity: On May 31, 1999 Ketchikan General Hospital reported the first case of influenza A in a tourist during the 1999 summer tourism season. Between May 31 and September 30, an average of 7.6 cases (range: 2 to 25 cases) of influenza A were reported weekly. The last case was reported on September 24 from Bartlett Regional Hospital (Figure 1).



Conclusions:

1. An outbreak of influenza A occurred among Alaska tourists from May 31 through September 24, 1999. This was the second summer season where widespread influenza activity was documented in Alaska among tourists.
2. Influenza A was also confirmed in Alaska residents. Because surveillance was designed to detect influenza among tourists, the impact to Alaska communities may be underrepresented.
3. All influenza isolates tested were subtype A/Sydney/05/97 (H3N2)-like. This was the predominant strain circulating worldwide over the past year. Influenza A Sydney was included in the 1998-99 and 1999-2000 influenza vaccine formulations.
4. Efforts to interrupt influenza transmission among summer travelers to Alaska have been unsuccessful to date (<http://www.cdc.gov/travel/feb99.htm>). Influenza vaccine is not readily available during summer months and antiviral agents are costly and not without significant side effects. More work is needed to understand and control influenza in this unique setting.

¹ Section of Epidemiology. [Summer Influenza A Hits Alaska](#). *Epidemiology Bulletin* No. 13, August 11, 1998.

² Section of Epidemiology. [Influenza A among Summer Tourists in Alaska-1999](#). *Epidemiology Bulletin* No. 9, July 2, 1999.

Thanks to all participating health care facilities and to the Alaska State Public Health Virology Laboratory in Fairbanks.
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