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## TRICHINOSIS OUTBREAK TRACED TO GRIZZLY BEAR MEAT AT BIRTHDAY PARTY

On March 15, 1985 an alert Kotzebue physician reported a case of possible trichinosis in a 30-year-old woman from Ambler. The patient was ill with myalgias, diarrhea, fever, vomiting and had an eosinophilia of 63%. Epidemiologic investigation led to the discovery of 11 additional individuals with trichinosis who consumed grizzly bear meat at a birthday party in January 1985.

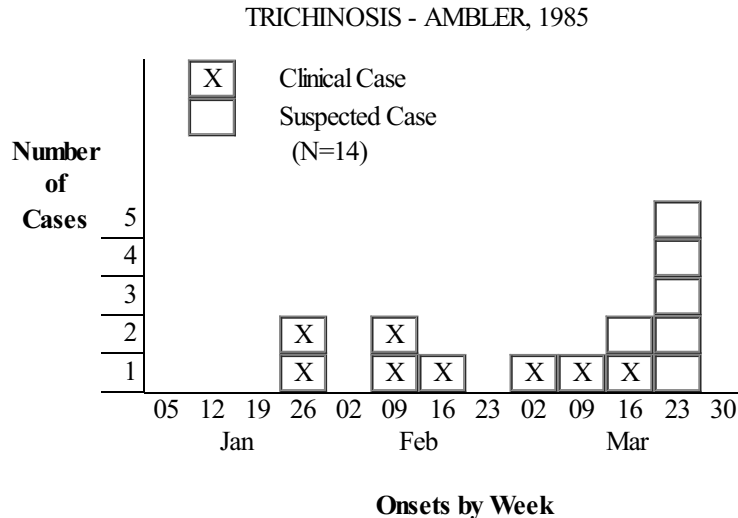
Sixteen individuals were present for the birthday party at which bear soup prepared from frozen grizzly bear meat was served. Frozen bear meat was cut into bite-size pieces and cooked along with vegetables for 1 to 2 hours to make bear soup. Six additional meals were prepared from this meat by family members and neighbors. The grizzly bear was killed on December 19 outside Ambler.

We interviewed and drew blood from 14 of the 16 individuals who attended the birthday party plus 3 other family members who did not eat at this party but who ate bear meat before or after the birthday meal. Of these 17 family members or friends, 8 met our clinical case definition of trichinosis: presence of at least 2 symptoms (diarrhea, myalgias, nausea, vomiting, abdominal cramps, fever, rash, periorbital edema) and an eosinophil count > 3%.

The most common symptoms were myalgias (43%) and diarrhea (43%). Eosinophil counts ranging from 6% to 14% were also found in 6 other suspected cases, 5 of whom were asymptomatic. For individuals who ate bear meat at the implicated meal, onset of symptoms ranged from 2-9 weeks (see Figure). Bentonite flocculation (BF) tests conducted at CDC, Atlanta, were negative except for the index case whose BF titer was 1:20. Samples of the bear meat are being tested for trichina - results are pending.

Shortly after this outbreak in Ambler, another outbreak of trichinosis was discovered in Nuiqsut that involved 4 individuals who ate raw walrus meat. Eosinophil counts were elevated in all 4 individuals. The walrus meat was positive for trichina larvae.

These 2 outbreaks show that trichinosis continues to remain a health problem in Alaska. Bear (polar, black, and brown) and walrus are potential hosts for *Trichinella*. Other hosts include bearded seal and ringed seal, although rates of infestation in these animals are less than 1.0 percent. Trichinosis can be prevented by cooking meat thoroughly. The arctic strain of *Trichinella* is resistant to freezing.



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