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Botulism - Outbreaks Continue

During 1991 (through October 15), the Section of Epidemiology has investigated nine botulism outbreaks (Figure 1). This is the largest number of outbreaks during any year since 1985.

Between 1987 and October 15, 1991 Alaska had 24 outbreaks which affected 45 persons and resulted in 5 deaths. All cases occurred among Alaska Natives following consumption of traditional Native food. Twenty-two of the outbreaks were laboratory confirmed either by identification of botulinum toxicity in serum, stool, vomitus, or food or by isolation of *Clostridium botulinum* organisms from stool or food. Of the laboratory confirmed cases, one was type B while the remainder were type E.

Most outbreaks occurred in the Bethel area (11); followed by Kotzebue, Nome, and Dillingham (3 each); Sitka (2); and Barrow and Juneau (1 each). A variety of traditional Native foods were implicated including "stink" fish, heads, or eggs (7 outbreaks); whale meat or blubber (3 outbreaks); and seal meat or blubber (3 outbreaks)(see Table 1).

Botulism is caused by ingestion of toxin produced by the bacteria *Cl. botulinum*. The disease is characterized by both neurologic and gastrointestinal symptoms--patients often have nausea or vomiting accompanied by dysphagia (difficulty swallowing), diplopia (double vision), xerostomia (dry mouth), and fixed and dilated pupils. The incubation period is usually 12-36 hours, although symptoms have appeared as early as 6 hours after consuming food containing botulinum toxin.

Early recognition and treatment of botulism is critical. In Alaska, the typical patient is first seen by a Community Health Aide (CHA). If botulism is suspected, the patient is transported as quickly as possible to the regional Indian Health Service (IHS) hospital and admitted. In general, if intubation and assisted ventilation is required, the patient is transferred to the Alaska Native Medical Center in Anchorage. **Because CHA's are often the first health care provider to evaluate a patient, their early suspicion of botulism and rapid reporting to IHS physicians has proven to be lifesaving.** All primary health care providers should consider botulism in the differential diagnosis of any Alaska Native with a combination of acute gastrointestinal and neurologic symptoms.

Botulism is a public health emergency. Possible cases should **immediately** be reported to the Section of Epidemiology (561-4406 during business hours; see August 26, 1991 Epidemiology Bulletin for after hours call list). An investigation will immediately be initiated to identify other persons possibly at risk, obtain specimens necessary for diagnosis, and prevent consumption of implicated food(s).

Table 1. Foods implicated in botulism outbreaks, 1987 - October 15, 1991; Alaska.

Food	Outbreaks
"Stink" fish, heads, or eggs	7
Whale	3
Seal meat or blubber	3
Seal oil or muktuk	2
Seal oil	1
Dried fish	1
Walrus	1
Native food, type uncertain	6

Figure 1. Botulism outbreaks, by year, 1975 - October 15, 1991; Alaska.

