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***Bulletin No. 21  
September 30, 1988***

**Botulism Strikes Newtok Child**

An alert Community Health Aide suspected botulism in an 8-year-old Newtok resident when she presented to the clinic with a complaint of droopy eyes, tummy-ache, lethargy, and muscular weakness. The health aide immediately radioed the Bethel physician, reporting that the young girl's pupils were widely dilated and non-reactive. The patient was scheduled for immediate medivac but was weathered in until the next day.

When the patient arrived at the Bethel PHS Hospital, she exhibited lethargy, slurred speech, decreased gag reflex, non-reactive and dilated pupils, ptosis, dry mouth, dysphasia, diffuse muscular weakness, and a respiratory vital capacity of 340 ml (predicted normal value = 1226). Based on these symptoms she was given botulism antitoxin (½ vial IV and ½ vial IM), intubated, and medivaced to the Alaska Native Medical Center, Anchorage, where she recovered without incident.

Investigation in the village of Newtok revealed that the patient had shared a meal of fermented red salmon heads (stinkheads) on Sunday, July 24, at 11:00 a.m., with five other family members. Two other villagers also ate from the same batch of stinkheads.

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After the meal, the patient played in the village until that evening when she spent the night with another family. During the evening she complained of stomach-ache and was more lethargic than usual. The next morning she was found lying on the couch complaining of stomach-ache and cloudy vision. The neighbor noticed that she did not want to swallow her morning juice. Children in the household told their mother that the patient's eyes looked droopy. She was taken to the health aide who suspected botulism and notified the village physician.

The stinkheads, prepared from cleaned and gutted red salmon, were brought to the village in a gunny sack after being caught around Chevak during the mid-part of July. The preparer placed a plastic garbage bag in a cardboard box. She then placed three to four inches of moss in the bottom of the plastic bag followed by ten fishheads in one layer. She then put approximately one and one-half feet of moss on top of the fishheads. The bag was closed and the box was placed in her above-ground storage shed which received full sunlight. The fishheads were left from five to seven days.

The box was then opened and two fishheads were eaten by one individual. She did not become ill. On Sunday, July 24, five of the fishheads were taken to the home of the patient, and one was taken to a next-door neighbor. When the box was opened again on July 26, maggots were seen in the fishheads, and the box was discarded. The box was recovered from the city dump; two fishheads were obtained for testing. Blood specimens from 7 contacts and stool specimens from 6 contacts were obtained.

All serum and stool specimens as well as gastric aspirate from the patient were negative for botulism toxin. Although the fishheads initially tested positive for botulism type E, on retesting, they showed only non-specific toxicity. Retesting of the fishheads again found no botulism toxin. Type E *Clostridium botulinum* organisms were found in fishheads and in stools from the patient and her sister.

Appropriate early diagnosis by an alert health aide secured prompt intensive care for this youngster with botulism. A high index of suspicion for botulism in individuals presenting with muscular weakness, dilated pupils, dry mouth, or diarrhea and vomiting, and a history of eating fermented foods should always be maintained.

The Section of Epidemiology should be notified immediately for all suspected or diagnosed cases of botulism.

(Reported by Elena Tom, CHA, Newtok)