



Bulletin No. 12
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BOTULISM

Botulism is an infrequent but recurrent and serious problem in the Alaska Native population. It is encouraging to note that despite an increasing number of outbreaks and cases, the case-fatality ratio has declined steadily over the past 15 to 20 years.

Much of the decline in the case-fatality ratio can be attributed to the rapid recognition of botulism by the community health aids and the physicians in the service units, the rapid reporting of botulism cases so that immediate epidemiologic investigations can be undertaken, and the rapid administration of trivalent botulism antitoxin (TBA). To insure that the case-fatality ratio remains low, we must insure that the initial response to botulism outbreaks operates smoothly and without delays.

Clinical recognition is often difficult; however, the most common symptoms associated with persons with laboratory confirmed botulism are dry throat and mouth (90%), nausea and vomiting (88%), dysphagia (76%), diplopia (66%), and dilated pupils (63%). Diseases often considered in the differential diagnosis include stroke, myasthenia gravis, paralytic shellfish poisoning, diphtheria, Guillain-Baare syndrome, and chemical intoxication.

Once the diagnosis of botulism is suspected (it can only be confirmed by laboratory testing) the following procedure should be followed:

1. Contact the Section of Epidemiology or the Arctic Investigations Laboratory (AIL) to report the outbreak and to discuss the use of TBA. The contact numbers are listed below in the order in which they should be called:
 - **Section of Epidemiology 561-4406**
 - Dr. Michael Beller 563-0851
 - Sue Anne Jenkerson 279-1021
 - Dr. Michael Jones 338-4748
 - Dr. John Middaugh 333-9349
 - **Arctic Investigations Laboratory 271-4011**
 - Dr. Robert Wainwright 337-8994
 - Dr. Ann Lanier 349-3707
 - Dr. Alan Parkinson 345-7695
2. Information needed in reporting the case or outbreak includes the following:
 - Name of case?
 - Birthdate?
 - Village?
 - Signs and symptoms, duration, are they progressing?
 - Foods eaten, when?
 - Other ill persons, where are they, symptoms?
 - Who ate the same food, where are they?
 - Has TBA been given, when, how much?
3. Before giving TBA obtain 40 cc's of whole blood (4 red top vacutainer tubes), separate and refrigerate serum. Send serum specimen to AIL for testing at the following address:

**Arctic Investigations Laboratory
225 Eagle Street
Anchorage, AK 99501
Phone: 271-4011**
4. Perform skin testing or lacrimal sac testing prior to administering TBA (see package insert).
5. Retain all passed stool and vomitus. Refrigerate and send to AIL for testing.
6. As soon as you suspect that a botulism patient will need to be transferred to ANMC-Anchorage, notify the medical officer on call or the Medicine Department as soon as possible at 279-6661.