

Clinical Guideline

Suspected Botulism

Potential exposure to botulism:

- Ingestion of fish/food fermented in an anaerobic environment or seal oil.
- Development of concerning symptoms thereafter (12-36 hours typical, but can be 6 hours to 10 days).

Clinical paradigm suggesting botulism?

- GI symptoms with autonomic or neurologic abnormality
- Cranial nerve deficit with no apparent cause
- Descending symmetrical paralysis or weakness with no apparent cause AND

At least three of the five following symptoms present (botulism "diagnostic pentad")?

- Dilated or fixed pupils
- Diplopia
- Dry throat
- Dysphagia
- Nausea or vomiting

Other Symptoms

- Sore throat
- Dysarthria
- Hyporeflexia
- Urinary retention
- Ileus

Suspected Botulism Obtain appropriate labs (below). Admit for close clinical monitoring. High Risk for Botulism Obtain blood for botulism testing before starting BAT. Order BAT using "ED Botulism" orderset. Watch for signs of anaphylaxis. Complete BAT packet found on State Epi website. Supportive care based on clinical picture. If not requiring higher level of care, admit for close clinical monitoring.

All cases:

- · Contact AK State Office of Epidemiology.
- Review resources on Botulism: wiki, State of Alaska.
- Collect lab specimens for testing at state lab:
 - -Use "ED Botulism" order set to find correct orders for testing.
 - -Collect 5-10 mL of serum (or 20 mL whole blood) for botulism testing (before BAT).
 - -Collect any stool (10-50 mL) and emesis (20 mL) for botulism testing.
 - -When possible, also collect suspect food (50 g, keep cold).
- Monitor clinically (24h likely adequate):
 - -Watch for "diagnostic pentad" symptoms above. Start BAT as appropriate.
 - -Monitor respiratory status. Obtain FVC at baseline and consider repeating q2h. May request RT perform bedside spirometry. Consider serial ABGs. Intubate if FVC declines 30%.
- Standard precautions are appropriate (not transmitted person-to-person).

Botulism Anti-Toxin (BAT)

- BAT does not reverse current anticholinergic symptoms but prevents progression by binding the toxin in the blood.
- No adverse effects of BAT have been reported thus far.
- Contact pharmacy early on if use anticipated; it needs to be thawed. Pharmacy can assist with BAT packet completion.

Note: Botulism toxin only causes flaccid paralysis. Patients are awake, alert, and aware. Procedures should be explained and appropriate pain control and sedation for intubated patients should be provided.

Resources

- AK State Office of Epidemiology Website:
 -907-269-8000 (M-F, 8-5) and 800-478-0084 (after hours)
- State Lab Website:
 - -1-855-222-9918
- Division of Public Health Healthcare Provider Checklist

Infant Botulism:

This is rare, with only 5 reported cases in AK in the past 65 years. If suspected, see Epi Procedure Manual, Botulism at State website.

This guideline is designed for the general use of most patients but may need to be adapted to meet the special needs of a specific patient as determined by the medical practitioner.

Approved by Clinical Guidelines Committee 3/13/23.

Click here to see the supplemental resources for this guideline.

If comments about this guideline, please contact clinical_guidelines@ykhc.org.