



Disease Control and Epidemiology

Two Foodborne Botulism Cases Identified in Orange County Residents

May 1, 2017 (update to April 28, 2017 advisory with potential source information)

Two cases of foodborne botulism (one confirmed, one suspect with testing pending) have been identified in Orange County residents in the last 30 days. The source for these cases is currently under investigation, but preliminary information suggests they may be associated with the consumption of a deer-antler tea product (see photos to the right).

Persons who purchased deer-antler tea product similar to this during the month of March should immediately dispose of it.



Photos courtesy of Los Angeles Public Health <https://t.co/e2TkWTWQpR>

Providers should:

- Consider botulism in patients with a compatible clinical presentation (see below).
- **Immediately report any suspect case of botulism to Orange County Public Health by phone at 714-834-8180. After hours, call 714-628-7008 and ask to speak to the Public Health Official on Call.**
- Advise patients who have consumed deer-antler tea product in the past couple weeks to seek immediate medical attention if symptoms of botulism develop.

Botulism is caused by *Clostridium botulinum*, a gram-positive, anaerobic, spore-forming bacteria which produces botulinum toxin. Botulism syndromes include infant, foodborne, wound, and adult intestinal colonization.

Symptoms:

- **Descending muscle weakness is the hallmark of botulism.** Symptoms usually begin with bilateral cranial nerve signs and symptoms including blurred vision, diplopia, ptosis, dysphagia, dysarthria, impaired gag reflex and facial weakness. Descending extremity muscle weakness then follows, and is classically bilateral and symmetric. In severe illness, respiratory muscles are involved; respiratory failure and death may occur unless supportive care including ventilation is provided.
- Death occurs in 5-10% of cases, due to unrecognized respiratory failure at the start of illness or complications of illness associated with prolonged intubation.

Diagnosis:

- Foodborne botulism is diagnosed by demonstration of toxin in serum, stool, or gastric aspirate using a toxin neutralization bioassay in mice. Testing takes over a week to complete, and is of varying sensitivity.

Treatment:

- **Treatment with antitoxin should be initiated immediately based on compatible clinical presentation and should not await laboratory confirmation.** Antitoxin is available from the CDC; OCHCA will help to procure antitoxin promptly.
- Equine-derived heptavalent botulinum antitoxin is currently the only specific treatment available in the United States for treatment of noninfant botulism. Antitoxin neutralizes circulating neurotoxin that has not yet bound to nerve endings. It slows disease progression but does not reverse paralysis.

Contact Information

For questions, please contact the **Epidemiology and Assessment Program at 714-834-8180.**