



HEALTH ADVISORY

Foodborne Botulism Outbreak

May 17, 2017

SITUATION

From mid-April through May 16, 2017, 10 cases of foodborne botulism have been reported to Sacramento, San Joaquin, Colusa and Solano county public health departments. Cases consumed nacho cheese sauce from the Valley Oak Food and Fuel gas station in Walnut Grove (Sacramento County). The nacho cheese sauce was removed on May 5 and the sale of prepared food at this gas station was stopped on May 6. No cases of botulism from this outbreak have been reported in Alameda County residents, but Alameda County residents who consumed prepared food at the Valley Oak Food and Fuel gas station in Walnut Grove until May 6 may still develop symptoms.

ACTIONS REQUESTED OF CLINICIANS:

1. **CONSIDER BOTULISM** in patients with bilateral cranial palsies: blurred vision, diplopia (double vision), ptosis, dysphagia, dysarthria, hoarseness/dysphonia, difficulty swallowing, impaired gag reflex or facial weakness. Classically, cranial palsies are followed by bilateral symmetrical, descending flaccid paralysis. Consider consulting with a neurologist.
2. **REPORT SUSPECTED BOTULISM** to Alameda County Public Health Department (ACPHD) **immediately by phone** at (510)267-3250 M-F, 8:30 am-5 pm or (925)422-7595 after hours, weekends and holidays. Botulism testing and release of antitoxin treatment must be approved by ACPHD and the California Department of Public Health. ACPHD will provide detailed instructions for specimen collection prior to antitoxin administration.
3. **ASK** patients with suspected foodborne botulism about exposure to prepared food, especially nacho cheese sauce, from the Valley Oak Food and Fuel gas station in Walnut Grove from 4/1/2017 through 5/6/2017, as well as home-canned and other high risk foods.

CLINICAL PRESENTATION: Botulism is a potentially fatal paralytic illness caused by a potent neurotoxin produced by *Clostridium botulinum*, a bacteria found in soil and aquatic sediments. Symptoms usually begin 18-36 hours after eating a contaminated food or drink, but may begin 6 hours to 10 days after exposure. In addition to bilateral cranial neuropathies and symmetrical descending weakness, diaphragmatic muscle weakness can result in respiratory failure and death if intensive care supportive treatment is delayed. Dry mouth, nausea, vomiting, diarrhea, abdominal pain, constipation, or urinary retention may be present. Fever is usually absent, and patients remain alert and responsive without sensory deficits. Cerebrospinal fluid values are normal. The differential diagnosis includes myasthenia gravis, variant Guillain-Barré Syndrome, stroke syndromes, Lambert-Eaton myasthenic syndrome, and tick paralysis. Symptom severity can range from mild cranial palsies to complete paralysis. Botulism anti-toxin should be given promptly to prevent progression of paralysis, and should not be withheld while waiting for laboratory test results. Supportive care and monitoring for respiratory failure is essential. Recovery occurs over weeks to months when affected nerve terminals regenerate.

RISK FACTORS: Conditions that promote *C. botulinum* growth and toxin production in food include high water content, low acid (pH>4.6), low salt and sugar content, and an anaerobic environment (canned, marinated in oil). High-risk foods included food canned, jarred, fermented, or preserved at home, home-made products marinated in oil, baked potatoes, pot pies, sautéed onions, smoked salmon, un-eviscerated fish, dried salted fish, fermented fish eggs, sausages, smoked or preserved meats and seafood. Although foodborne botulism is often linked to home-canned food, outbreaks have been associated with commercially produced products, including canned cheese, soups or mixed grains that were meant to be refrigerated but were stored at room temperature, and jarred black fungus.

RESOURCES: CDC Botulism page: <https://www.cdc.gov/botulism/index.html>