



Poison HOTLINE

1-800-222-1222



Did you know

In 2014 there were 128 cases of infant botulism reported in the U.S. Infant Botulism occurs when botulism spores are ingested and grow in a baby's immature intestinal tract. It typically occurs in children between the ages of 2 – 8 months and is more common during spring and summer months. Honey can contain botulism spores, therefore infants less than 12 months of age should avoid eating honey. Raw (not heated or pasteurized) forms of honey are of greatest risk.

Constipation is often the first symptom with infant botulism. Other symptoms include floppy movements due to muscle weakness, weak cry, fussiness, difficulty feeding and sucking, droopy eyelids and drooling.

Botulism

Botulism is a serious condition caused by a neurotoxin produced by the bacteria *Clostridium botulinum*. There are 3 types of botulism: foodborne, infant and wound botulism. This article will focus on food-borne botulism only.

Food-borne botulism is often associated with canned food with the most well-known causes being improperly home-canned vegetables, fish, or meats. Non-canned foods such as baked potatoes and turkey stuffing have also been reported to cause food-borne botulism. Botulin toxin is heat labile and can be destroyed by heating to 176°F (80°C) for 30 minutes or 212°F (100°C) for 10 minutes (longer times at higher altitudes). Unlike the toxin, botulinum spores are very resilient and require higher temperatures and a longer duration of heating to kill. The USDA website has excellent guidance for home canning.

Botulinum toxin is broken into 7 serotypes: A, B, C, D, E, F, and G. Human botulism is caused mainly by A, B, E, and (rarely) F. Botulinum toxin is extremely potent and capable of causing illness at very small doses (oral lethal dose estimated to be 1 mcg/kg). Botulism leads to symmetric muscle weakness that begins with the muscles of the face and then spreads downward to the limbs and torso. Symptoms usually develop between 12-36 hours (range 6 hours to 8 days) after eating food that contains the toxin. Symptoms include double vision, blurred vision, droopy eyelids, slurred speech, trouble swallowing, and muscle weakness. In severe forms, botulism leads to paralysis of the breathing muscles and causes respiratory failure. Confirmatory lab testing often takes days to report the result.

Treatment consists of good supportive care including intubation and respiratory support if needed. Botulinum antitoxin is most effective when given within 24 hours of the onset of symptoms. Administration is based on patient symptoms, clinical exam, and history. The antitoxin binds with circulating free toxin and prevents the progression of the illness. However, it does not reverse the muscle weakness and paralysis that has already developed.

Contact the IPCC at **1-800-222-1222** for assistance in the diagnosis, management and treatment of botulism cases.

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POISON
Help
1-800-222-1222

The logo for Poison Help, featuring the word "POISON" in a bold, black, sans-serif font above the word "Help" in a larger, bold, black, sans-serif font. To the right of the word "Help" is a red pill bottle with a white skull and crossbones symbol on its label. Below the word "Help" is the phone number "1-800-222-1222" in a bold, black, sans-serif font.

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