



Botulism

What is botulism?

Botulism is a rare, but serious illness caused by a nerve poison (toxin) produced by the bacteria called *Clostridium botulinum* (*C. botulinum*), commonly found in soil. It is not spread from one person to another or by animals. When the bacteria contaminates food, it grows producing the toxin. When the toxin is unknowingly eaten, it produces paralysis.

Types of Botulism:

- Foodborne botulism is caused by eating foods that contain the botulism toxin. This can lead to illness within a few hours to a few days.
- Wound botulism occurs when wounds are infected with bacteria which releases the poison.
- Infant botulism occurs in a small number of infants who consume bacteria spores in honey, which then grow in the intestines and release poison.

All forms of botulism can be fatal and are considered medical emergencies.

What are the dangers of botulism?

When muscles are paralyzed your chest won't move. Botulism can result in death due to respiratory failure. A patient with severe botulism may require a breathing machine as well as medical and nursing care for several months. Patients who survive botulism poisoning may have fatigue and shortness of breath for years.

What are the symptoms of botulism?

The classic symptoms include double vision, blurred vision, drooping eyelids, slurred speech, difficulty swallowing, dry mouth and muscle weakness that always descends through the body: first the shoulders, then upper arms, lower arms, thighs, calves, etc. Symptoms generally begin 18 to 36 hours after eating contaminated food, but may begin as early as six hours or as late as ten days. Infants with botulism appear sluggish, feed poorly, are constipated and have a weak cry and poor muscle tone. The paralysis of breathing muscles can cause a person to stop breathing and die, unless breathing assistance is provided.

Can botulism be prevented?

- Yes. Foodborne botulism is often caused by contaminated home-canned foods and other food sources. Persons who do home canning should follow strict hygiene procedures to reduce contamination. Oils infused with garlic or herbs should be refrigerated. Potatoes baked in aluminum foil should be kept hot until served or refrigerated.
- One source of infant botulism has been honey, which may contain the bacteria spores. Children less than 12 months of age should not be fed honey.
- Wound botulism can be prevented by seeking medical care for infected wounds promptly and by not using injectable street drugs.

How is botulism treated?

If diagnosed early, food borne and wound botulism can be treated with an antitoxin. This can prevent patients from worsening, but recovery still takes many weeks. Wounds may be treated surgically, to remove the source of the bacteria. Currently, antitoxin is not usually given for treatment of infant botulism.

If a patient has respiratory failure and is not able to breathe on his own, he may be on a breathing machine for weeks, along with medical and nursing care. After several weeks, the paralysis slowly improves.

Good supportive care in a hospital is the main type of therapy for all forms of botulism.

For more information, call the Guilford County Department of Health and Human Services, Division of Public Health at (336) 641-7777 or visit our website at www.myguilford.com or visit the Centers for Disease Control and Prevention at www.cdc.gov