



Botulism Fact Sheet

What Is Botulism?

Botulism is a rare but severe illness that can paralyze the victim. It is caused by a nerve toxin (poison) made by the bacterium *Clostridium botulinum*.

How Do You Get It?

There are three main kinds of the illness, all can be fatal and require urgent care:

- Foodborne botulism occurs after eating food that contains the toxin. This form of botulism may be the most severe of the three because many people can be poisoned at once by eating food that contains the toxin.
- Wound botulism occurs when a wound infected with *Clostridium botulinum* makes the toxin.
- Infant botulism occurs when a baby eats the bacteria's spores. The spores then grow in the body and release toxin.

Outbreaks of foodborne botulism among two or more persons occur most years and, most of the time, are from eating contaminated home-canned foods.

How Dangerous Is Botulism?

Botulism can cause someone to stop breathing and then die. However, in the past 50 years the proportion of patients with botulism who dies has fallen from about 50% to 8%. 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 and long-term therapy may be needed to help them get well.

What Are the Symptoms?

The toxin causes muscle paralysis. The symptoms of the illness include double vision, blurred vision, drooping eyelids, slurred speech, trouble swallowing, dry mouth, and muscle weakness. Infants with botulism appear tired and slow, feed poorly, are constipated, and have a weak cry and poor muscle tone. If these symptoms are not treated, they may worsen to cause paralysis of the arms, legs, trunk, and muscles for breathing.

How Soon Do Infected People Get Sick?

In foodborne botulism, symptoms begin around 18 to 36 hours after eating food with the toxin, but they can occur as early as 6 hours or as late as 10 days.

How Is Botulism Treated?

Not being able to breathe and the paralysis that occur with severe botulism may require a patient to be on a breathing machine (ventilator) for weeks and receive intensive medical and nursing care. After several weeks, the paralysis slowly improves. If diagnosed early, foodborne and wound botulism can be treated with an antitoxin which blocks the actions of toxin in the blood. This can prevent patients from worsening, but it still



takes many weeks to get well. Physicians may try to remove the bad food still in the gut by causing the patient to vomit or by using enemas. Wounds should be treated, often with surgery, to remove the source of the bacteria that makes the toxin. Good supportive care in a hospital is a good treatment for all forms of botulism. Antitoxin is not often given for treatment of infant botulism.

Can Botulism Be Prevented?

People can avoid getting botulism. The foodborne form is often from home-canned foods with low acid content, such as asparagus, green beans, beets, and corn. However, outbreaks of the disease sometimes occur from sources such as chopped garlic in oil, chili peppers, tomatoes, poorly handled baked potatoes wrapped in aluminum foil, and home-canned or fermented fish.

People who do home canning should be careful about how they do the canning. Oils with garlic or herbs in them should be refrigerated. Potatoes which have been baked while wrapped in aluminum foil should be kept hot until served or refrigerated. Because the botulism toxin is destroyed by high heat, people who eat home-canned foods should boil the food for 10 minutes before eating it to ensure safety.

Because honey can contain spores of *Clostridium botulinum*, and this has been a source of disease for infants, children less than 12 months old should not be fed honey. Honey is safe for persons 1 year of age and older.

Wound botulism can be prevented by promptly seeking medical care for infected wounds and by not using injectable street drugs.

What Should I Do if I Think I *Have* Botulism?

If you have symptoms of botulism, call your health care provider right away.

What Should I Do if I Think I Have Been *Exposed* to Botulism?

If you have symptoms of botulism, call your health care provider right away.

Need More Information?

Center for Disease Control website: <http://www.bt.cdc.gov/agent/botulism/index.asp>
Alameda County Public Health Department website: <http://www.acphd.org>