



FACT SHEET Botulism

What is botulism?

Botulism is a rare but serious illness that can paralyze. It is caused by a nerve toxin produced by the bacteria *Clostridium botulinum*. There are three forms of botulism – foodborne, infant, and wound. All forms of botulism can be fatal and are considered medical emergencies. Foodborne botulism can be especially dangerous. Many people can be poisoned by eating contaminated food.

How do people get infected with botulism?

- Foodborne botulism is caused by eating foods that contain the botulinum toxin.
- Infant botulism is caused by consuming the spores of the botulinum bacteria, which then grow in the intestines and release toxin.
- Wound botulism is caused by toxin produced from a wound infected with botulinum.

What are the symptoms of botulism?

The first symptoms of botulism may include:

- Double or blurred vision
- Drooping eyelids
- Slurred speech
- Difficulty swallowing
- Dry mouth
- Muscle weakness

If a health care provider cannot identify and treat the illness early, the symptoms progress to paralysis of the arms, legs, trunk and respiratory system.

Infants with botulism:

- Appear lethargic
- Feed poorly
- Are constipated
- Have a weak cry
- Have poor muscle tone

These are all symptoms of the muscle paralysis caused by the toxin.

How soon do infected people get sick?

In foodborne botulism, symptoms generally begin 18 to 36 hours after eating a contaminated food. Symptoms can occur as early as six hours or as late as 10 days. In wound botulism, the incubation period is generally seven days although it can range from four to 14 days. In infant botulism, the incubation period is unknown since it is usually not known when the spores were ingested.

Can botulism be spread from person to person?

No, botulism is not known to be spread from person to person.

How is botulism treated?

Intensive medical and nursing care in a hospital is the basis of treatment for all forms of botulism. Often a breathing machine (ventilator) is needed to help people breathe until they recover from the toxin, which can take up to eight weeks. If diagnosed early, foodborne and wound botulism can be treated with an antitoxin. This blocks the ability of the toxin to circulate in the blood. In cases of foodborne botulism, doctors may try to remove contaminated food still in the stomach by inducing vomiting or by using enemas. In cases of wound botulism, wounds are thoroughly cleaned to remove the source of the toxin-producing bacteria.

Currently, antitoxin is not routinely given for treatment of infant botulism.

Is there a botulism vaccine?

No, there is not a vaccine for botulism.

How can botulism be prevented?

Foodborne botulism has often been associated with home-canned foods with low acid content. People who do home canning should follow strict hygienic procedures to reduce contamination of foods. Since the botulinum toxin is destroyed by high temperatures, people who eat home-canned foods should consider boiling the food for 10 minutes before eating it to ensure safety. Children less than 12 months old should not be fed honey. Honey can contain botulinum spores. This has been a source of infection for infants. Wound botulism can be prevented by seeking prompt medical care for infected wounds.

Can botulism be used as a weapon?

The high toxicity of botulinum toxins and the ease of production, transport and delivery make this an agent of concern for bioterrorism. Smallpox is classified as a Category A agent by the Centers for Disease Control and Prevention. Category A agents are considered the highest threat to national security due to their ease of transmission and high rate of death or serious illness.