

# Botulism

## BIOTERRORISM FACT SHEET

### What is botulism?

Botulism is a serious, potentially fatal illness caused by a type of poison. The poison – known as botulinum toxin – is produced by a kind of bacteria. Botulinum toxin is the strongest poison known to science.

Botulism is always considered a medical emergency. It can cause death by paralyzing the muscles people use to breathe. However, over the past 50 years, with better care, the death rate for people with botulism has dropped from 50 percent to eight percent.

On average, about 110 cases of botulism are reported in the U.S. every year.

### How do you get botulism?

In nature, people can get botulism in three different ways:

- by eating food contaminated with the poison
- from the poison produced when a wound is infected with the bacteria
- when a baby eats or drinks something that contains spores of the bacteria – the hard-shelled form that the bacteria take on when they aren't able to grow and reproduce

It is also believed that the botulism poison could be used as a weapon – by deliberately putting it in food, or by releasing it into the air, so people inhale it.

### Can you get botulism from other people?

No. Again, botulism is a type of poison. It isn't caused by a living organism, and it can't be passed from one person to another.

### What are the symptoms?

Symptoms of botulism are the same, regardless of how people get it. They include double vision, blurred vision, drooping eyelids, slurred speech, difficulty swallowing, dry mouth, and muscle weakness. Infants with botulism appear lethargic, feed poorly, become constipated, and have a weak cry and poor muscle tone. These are all symptoms of the muscle paralysis caused by the poison. Without treatment, people with botulism may go on to develop paralysis of the arms, legs, trunk, and the muscles used for breathing.

When botulism is caused by contaminated food, symptoms usually appear within 18 to 36 hours. However, they can start as soon as six hours later – or as long as 10 days later.

### Can botulism be treated?

Intensive supportive care in a hospital is the primary treatment for all forms of botulism. That may include measures designed to help the patient breathe. If the illness is identified quickly, medications are available to block the effects of the poison – but those medications cannot be used to treat infants. Steps may be taken to purge contaminated food from the patient's digestive system. When people develop botulism from a wound, the source of the poison can be surgically removed.

In severe cases, recovery from botulism can take weeks, or even months. The after-effects – which can include fatigue and shortness of breath – can last for years.



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### **Can botulism be prevented?**

There is no vaccine available to protect the general public against botulism. An experimental vaccine is sometimes used to protect laboratory workers and military personnel. Food-related botulism can be prevented through careful food-handling practices – home-canned foods are a special source of concern. Infants under the age of 12 months shouldn't be fed honey, which can contain the spores of botulism bacteria.

### **Why is botulism considered a possible terror weapon?**

The poison produced by botulism bacteria is extremely strong and highly lethal. The poison is also easy to produce and transport. And people who develop botulism require prolonged, intensive care. A large outbreak of botulism would create a major disruption of normal activity.

Attempts to use botulism as a weapon go back at least to World War II. Since the 1970s, a number of nations have developed – or are believed to be developing – the capability to use botulism as a weapon. A Japanese religious cult tried to release botulism poison into the air at several locations in the Tokyo area, at least three times, between 1990 and 1995.

### **What should I do if I think I may have botulism?**

If you have any of the symptoms of botulism, see your doctor immediately. Contact your local law enforcement agency if you see any suspicious situations or activity in your community that may involve the use of botulism – or any other biological agent – as a weapon.