

Botulism

Fact Sheet



Maine Center for Disease
Control and Prevention
An Office of the
Department of Health and Human Services

Paul R. LePage, Governor

Mary C. Mayhew, Commissioner

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.

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.

What are the symptoms of botulism?

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.

How soon do symptoms appear?

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 you get botulism from other people?

No. Botulism is a type of poison. It cannot be passed from one person to another.

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.

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 should not be fed honey, which can contain the spores of botulism bacteria.

What foods are commonly associated with botulism?

Botulism is most often associated with home-canned foods that have a low-acid content, such as asparagus, green beans, beets and corn. However, outbreaks of botulism from more unusual sources such as chopped garlic in oil, chili peppers, improperly handled baked potatoes wrapped in aluminum foil, and home-canned or fermented fish have occurred.

Honey can contain the botulism bacteria and can be a problem for children under 1 year of age.

How common is botulism in the U.S.?

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

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.

What should I do if I think I have botulism?

If you have any of the symptoms of botulism, see your doctor immediately.

Botulism in Maine

Fortunately, botulism is rare in Maine. There have only been a few cases reported in the past 10 years. For more information, please visit the Maine CDC website: <http://www.maine.gov/dhhs/boh/newpubs.htm> and refer to the Infectious Disease Epidemiology Program Documents.

Where can I get more information?

For more information contact your healthcare provider or local health center. You can also contact the Maine Center for Disease Control and Prevention by calling 1-800-821-5821. The federal Centers for Disease Control and Prevention website - <http://www.cdc.gov> – is another excellent source of health information