

Fact sheet

Botulism (foodborne)

What is foodborne botulism?

Foodborne botulism is a food poisoning caused by a toxin produced by the bacteria, *Clostridium botulinum*. It occurs naturally in soil. Babies get infant botulism after consuming spores of the bacteria, which then grow and multiply in their intestinal tracts and make toxins.

How is foodborne botulism spread?

It is not spread person-to-person. A person must eat contaminated food that has not been properly cooked or reheated after the toxin has been produced by the bacteria. This toxin does not give a bad odor or taste to food. Botulism most often develops after consuming improperly processed home-canned foods or home-preserved meats.

What are the signs and symptoms of foodborne botulism?

Foodborne botulism produces symptoms that affect the nervous system. Symptoms include difficulty swallowing or speaking, dry mouth, facial weakness on both sides of the face, blurred or double vision, drooping eyelids, nausea, vomiting and abdominal cramps, and paralysis. Botulism also can weaken the muscles involved in breathing, which can lead to difficulty breathing and even death.

How long after infection do symptoms appear?

Signs and symptoms of foodborne botulism typically begin between 12 and 36 hours after the toxin gets into your body. But the start of symptoms can range from a few hours to several days, depending on the amount of toxin ingested.

Who is most at risk?

- People who inject certain drugs, such as black tar heroin, put themselves at greater risk of getting wound botulism.
- People who drink certain kinds of alcohol they make themselves, such as prisoners who drink “pruno” or “hooch” made in prisons, put themselves at greater risk of getting foodborne botulism.
- People who eat home-canned or home-fermented foods that haven’t been prepared safely also have a greater chance of becoming seriously sick. These foods may include many home-canned vegetables and meats, and traditional Alaska Native fermented foods.
- People who get botulinum toxin injections for cosmetic reasons (such as for wrinkles) or medical reasons (such as for migraine headaches) may be more likely to get botulism if the dose they receive is too large, if they are

children or weigh less than a typical adult, or if they have an underlying problem with their nerves or muscles.

What type of health problems are caused by foodborne botulism?

Death can result from respiratory failure or the consequences of extended paralysis. About 5% of patients die. Recovery takes weeks to months. Those who survive may have fatigue and shortness of breath for years.

How is foodborne botulism diagnosed?

To diagnose botulism, your healthcare provider will check you for signs of muscle weakness or paralysis, such as drooping eyelids and a weak voice. Your healthcare provider will also ask about the foods you've eaten in the past few days. You may require other tests such as a brain scan or spinal fluid examination.

How is foodborne botulism treated?

Botulism is treated with a drug called an antitoxin. The toxin attacks the body's nerves, and the antitoxin prevents it from causing any more harm. It does not heal the damage the toxin has already done. If your disease is severe, you may have breathing problems and even respiratory failure if the toxin paralyzes the muscles involved in breathing. If that happens, you may be put on a breathing machine until you are able to breathe on your own. The paralysis caused by the toxin will improve slowly.

How can foodborne botulism be prevented?

- Follow [safe home-canning](#) instructions as recommended by the U.S. Department of Agriculture in the [USDA Complete Guide to Home Canning](#).
- Follow all instructions for washing, cleaning, and sterilizing items used in canning.
- Use pressure canners for low-acid foods like potatoes, most other vegetables, and meats.
- Refrigerate homemade oils infused with garlic or herbs and throw away any unused oils after 4 days.
- Keep potatoes that have been baked while wrapped in aluminum foil hot (at temperatures above 140°F) until they are served, or refrigerate them with the foil loosened.

Where can I get more information?

- Your personal healthcare provider
- [Centers for Disease Control and Prevention](#)
- [U.S. Department of Agriculture](#)
- [Utah Department of Health and Human Services](#)