

## Botulism - Factsheet

### What is botulism?

Botulism is caused by a toxin made by a bacterium known as *Clostridium botulinum*. It causes a muscle-paralyzing disease. There are five types of botulism:

- **Foodborne botulism** happens when a person consumes food containing the botulinum toxin and becomes ill within a few hours to days.
- **Infant botulism (also called intestinal botulism)** happens when botulism spores settle in the intestine and then produce the toxin. This usually affects infants but may also take place in adults who have certain preexisting intestinal conditions.
- **Wound botulism** happens when a wound has been contaminated or “dirtied” by soil or gravel and the wound is then sealed off from outside air.
- **Iatrogenic botulism** happens when too much of the botulinum toxin is injected, commonly in cosmetic procedures or clinical injections for migraine treatment.
- **Inhalation botulism** happens when the toxin is aerosolized then inhaled.

### What are the symptoms of botulism?

- Symptoms of **foodborne botulism** include blurred or double vision, dry mouth, and muscle paralysis that may affect breathing. These symptoms appear 12 to 36 hours after eating the food that contains the toxin.
- Symptoms of **infant botulism** may include constipation, weakness, difficulty breathing, poor feeding, and poor reflexes. It is unknown how long it takes for infant botulism to appear after exposure.
- Symptoms of **wound, inhalation and iatrogenic botulism** are very similar to foodborne botulism. Wound botulism symptoms appear after about seven days. Studies in monkeys have shown that symptoms of inhalation botulism would probably occur 12 to 80 hours after exposure.

### How is botulism spread?

A person must eat contaminated food that has not been properly cooked or reheated. With infant botulism, an infant eats food containing bacterial spores and then the bacteria produce the toxin in their gastrointestinal tract. Wound botulism is rare and happens when botulism spores are introduced into a wound by contaminated soil or gravel.

### How long are people contagious?

Botulism is not spread from person to person. In other words, people with botulism are not contagious.

### Who gets botulism?

Anyone can get botulism.

### What treatment is available for people with botulism?

Immediate hospital care is necessary. People with botulism may need help with breathing. Anti-toxin treatments are available for cases of botulism. Some may require hospitalization. They can return to school or work once they feel well enough.

## How can I protect myself and my family from getting botulism?

- Honey should not be fed to infants less than 12 months of age.
- All canned and preserved foods should be properly processed and prepared.
- Do not open bulging containers or eat or taste goods with strange odors.
- Return unopened commercial cans with bulging lids to the place of purchase.
- Home-canned vegetables should be boiled and stirred, for at least three minutes before eating. Tomatoes and low-acid foods should be boiled for 10 minutes when below 1000 feet elevation, adding 1 additional minute for every additional 1000 feet in elevation.
- Wound botulism can be prevented by promptly seeking medical care for infected wounds and by not injecting street drugs.