What are the symptoms of

BOTULISM

Symptoms of botulism generally begin 12 to 72 hours after ingesting the toxin but may begin as early as 2 hours or as late as 8 days.

Symptoms include:

double vision

blurred vision

drooping eyelids

slurred speech

difficulty swallowing

dry mouth, and

muscle weakness

If untreated, these symptoms may progress to paralysis of the arms, legs, and respiratory muscles, and lead to death. Weakness and paralysis begin with the muscles of the head and neck and then descend to the upper body, arms, lower body, and legs.

For more information, call

Aloha United Way

2 1 1

www.hawaii.gov/doh
or
www.cdc.gov

Linda Lingle, Governor

Chiyome L. Fukino, M.D., Director of Health

The Health State
HAWAI'I DEPARTMENT OF HEALTH

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Write or call our Affirmative Action Officer at Box 3378, Honolulu, HI 96801-3378 or at (808) 586-4616 (voice) within 180 days of a problem.

11/03

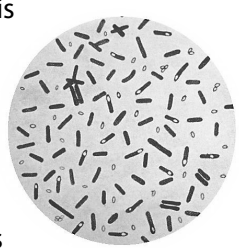
CAUTION BIOHAZARD

BOTULISM

Hawaii State Department of Health
www.hawaii.gov/doh
For more information or referral
Call 2-1-1

What is botulism?

Botulism is a serious muscle-paralyzing illness caused by a nerve toxin that is produced by the bacteria *Clostridium botulinum*. Three forms of botulism occur naturally.



- **Foodborne botulism** occurs when a person eats food contaminated with the toxin produced by the botulism bacteria. This leads to severe illness that occurs within a few hours or several days. Foodborne botulism is a public health emergency because the contaminated food may be eaten by a number of people before being identified.
- **Infant botulism** occurs in a small number of infants each year who have *C. botulinum* in their intestinal tract from ingesting botulism spores. These spores are quite common and are usually found in food such as honey.
- **Wound botulism** occurs when wounds are infected with soil containing *C. botulinum* that produces the toxin.

A fourth man-made form of botulism can occur if the toxin is inhaled into the lungs.

How is botulism spread?

Botulism is most commonly found in contaminated food. Heating of food will inactivate the toxin. Botulism is not contagious; it does not spread from person to person.

Photomicrograph of Clostridium botulinum type A courtesy Public Health Image Library, Center for Disease Control and Prevention.

What are the symptoms of botulism?

Symptoms of botulism generally begin 12 to 72 hours after ingesting the toxin but may begin as early as 2 hours or as late as 8 days. Symptoms include double vision, blurred vision, drooping eyelids, slurred speech, difficulty swallowing, dry mouth, and muscle weakness. If untreated, these symptoms may progress to paralysis of the arms, legs, and respiratory muscles, and can lead to death. Weakness and paralysis begin with the muscles of the head and neck and then descend to the upper body, arms, lower body, and legs.

How can botulism be treated?

An antitoxin to botulism exists but must be given as soon as possible after the diagnosis is made. The antitoxin can prevent progression of the disease, but does not reverse paralysis that has already occurred. Antibiotics are not effective in treating botulism.

Good supportive care in a hospital is the mainstay of therapy for all forms of botulism. A patient with severe botulism may require a breathing machine as well as intensive medical and nursing care for several months. Patients who survive an episode of botulism poisoning may have fatigue and shortness of breath for years and long-term therapy may be needed to aid recovery.

Why is there concern about botulism as a bioweapon agent?

Botulism is a very serious illness. The bacteria that cause the disease are readily available and could be used to contaminate food or water supplies.

What should you do if you were exposed to botulism?

Seek prompt medical attention. All foods suspected of being contaminated with botulinum toxin should be removed and stored away from any other possible consumers and given to the Department of Health for testing when possible. If toxin came in contact with clothing or skin, clothing should be removed and skin washed with soap and water.

What is the public health community doing to prevent and control botulism?

State health departments and CDC have persons knowledgeable about botulism available to consult with physicians 24 hours a day. If antitoxin is needed to treat a patient, it can be quickly delivered to a physician anywhere in the country. Suspected outbreaks of botulism are quickly investigated, and if they involve a commercial product, the appropriate control measures are coordinated among public health and regulatory agencies. Physicians should report suspected cases of botulism to a state health department.

Can pets and other animals get botulism?

Yes. Your pet or farm animals could get botulism from eating contaminated food or inhaling toxin. If you think your pet has been exposed, seek prompt veterinary attention for the animal. Animals cannot transmit the disease to humans.