

# BOTULISM



## BASIC INFORMATION

### DESCRIPTION

A serious, non-contagious form of food poisoning usually caused by eating contaminated food containing a toxin that severely affects the nervous system. Two other types exist, wound botulism and infant botulism. It affects the central nervous system and the muscular system.

### FREQUENT SIGNS AND SYMPTOMS

The following symptoms usually appear suddenly 18 to 36 hours after eating contaminated food:

- Blurred or double vision.
- Drooping eyelids.
- Dry mouth.
- Slurred speech.
- Swallowing difficulty.
- Vomiting and diarrhea.
- Weakness of the arms and legs, leading to paralysis.
- No fever.
- No disturbance of mental abilities.

The following symptoms appear in infants:

- Severe constipation.
- Feeble cry.
- Inability to suck.

### CAUSES

- Infection with bacteria, *Clostridium botulinum*, found in contaminated or incompletely cooked, canned foods. This germ generates a powerful poison (toxin) that is absorbed from the digestive tract and spreads to the central nervous system.
- Foods likely to cause botulism include home-canned vegetables and fruits, fish, meat, undercooked sausage, smoked meats and milk products.
- In infants under 1 year, raw honey or other uncooked foods may cause botulism.
- The bacteria also may contaminate a wound and produce the toxin.

### RISK INCREASES WITH

- Infants.
- Home-canned foods. Green beans are especially susceptible to spoilage.

### PREVENTIVE MEASURES

- If a can is bulging, or the contents have a peculiar color or odor, don't even taste the food.
- Don't eat any foods not definitely known to be properly cooked and canned.
- Don't give infants honey in foods or cough suppressants.

- Boiling can prevent botulism, but call your local home-extension service for details about canning food and cooking it safely. You may get additional information from Center for Nutrition and Dietetics National Consumer Hotline, (800) 366-1655.

- Call your local health department if you suspect botulism. The health department can notify the news media to alert others in danger and require retailers to remove contaminated food from store shelves.

### EXPECTED OUTCOMES

With prompt care, the outlook is good. The larger the toxin dose and the sooner symptoms begin, the more dangerous the condition. The overall death rate is 10% to 25%.

### POSSIBLE COMPLICATIONS

- Lung infections as a result of impaired swallowing and choking on food.
- Respiratory failure caused by weak breathing muscles.
- Death.



## TREATMENT

### GENERAL MEASURES

- Hospitalization for intensive care. A respirator may be necessary.
- Induce vomiting if only a few hours have passed since the poisoned food was eaten.
- If you suspect botulism, refrigerate some of the contaminated food for laboratory testing, if possible.

### MEDICATIONS

Botulism antitoxin injections prevent the condition from worsening. The antitoxin is available through the Center for Disease Control, Atlanta, Georgia. The antitoxin is derived from horse serum, which may be life-saving, but has serious side effects.

### ACTIVITY

Bed rest is necessary during hospitalization. After treatment, resume normal activities gradually.

### DIET

Intravenous fluids and feedings are usually necessary during hospitalization because of swallowing difficulty. After treatment, no special diet is necessary.



## NOTIFY OUR OFFICE IF

- You or a family member has symptoms of botulism. Call an ambulance immediately. This is an emergency!
- Weakness, blurred vision or slurred speech occur after you return from intensive care. These may signal a need for additional treatment.