

# Potential Exposure to Botulinum neurotoxin (BoNT)

## What is Botulinum neurotoxin (BoNT)?

- BoNT is a protein neurotoxin.
- BoNT is not transmitted dermally (through the skin) unless a wound is present and is not spread person-to-person.
- Persons can be exposed to BoNT through direct inhalation of toxins, contact with an open wound, or ingestion.
- BoNT is inactivated by sunlight within 1-3 hours. Heat (176°F for 30 minutes or 212°F for several minutes) and chlorine (10% solution) also destroy the toxin.
- BoNT is detoxified in open air within 12 hours.

## What symptoms should I be concerned?

- Double vision
- Blurred vision
- Drooping eyelids
- Slurred speech
- Difficulty swallowing
- Dry mouth
- Muscle weakness that spreads through body
- Difficulty breathing

## When may symptoms occur after exposure?

- Symptoms can start as early as 3 hours or late as a few days from the exposure.

## What do I do if I get these symptoms?

- Contact your healthcare provider immediately.

## What is the outcome from getting BoNT?

- Paralysis may occur and the paralysis may be permanent. Death is also a possibility.
- Your recovery may take weeks or months.

## How do I decontaminate skin, personal items, and clothing after exposure?



- Decontaminate skin with soap and water.
- Personal items such as clothing can be washed in soap and water.
- Try to handle the items as minimally as possible.
- For hard items that are metal (NOT jewelry or watches), plastic, or glass, a fresh solution of 1 part unscented, liquid, household chlorine bleach to 9 parts clean water can be used.
- Wipe items and wait 30 minutes.
- Wipe off residue with clean damp cloth. Jewelry and watches (if waterproof) that contain gold or precious metals should be cleaned in a mild soap and water solution, if you are unsure, contact a reputable jeweler for assistance.
- For cell phones, use the manufacturer's recommendation for cleaning.

### **What are some Do's and Don'ts for cell phones?**

- Do not use a cleaner that contains ammonia.
- Do use a soft material like cloth instead of a paper towel.
- Do use a 70% solution of ethanol (drinking alcohol) or isopropyl alcohol (rubbing alcohol) may also be used.
- Do allow items to dry thoroughly.
- Do not spray your cell phone with cleaners; wipe it with a damp cloth. Apple does not recommend using any alcohol to clean their products because they have been treated with an oleophobic coating. Call your cell phone company.

### **What about the building surfaces?**

- Decontamination of surfaces can be accomplished by wiping hard surfaces with a 10% bleach solution, waiting 30 minutes, and wiping the residue away with a cloth dampened with clean water.
- Carpets may be steam cleaned.
- It is recommended that individuals performing the clean up use personal protective equipment (PPE) consisting of coveralls, protective shoe coverings, gloves, eye protection, and N95 mask.

### **Where can I find more information about the disease?**

Go to [cdc.gov](http://cdc.gov) and type Botulism in SEARCH box or United States Army Medical Research Institute of Infectious Disease, Blue Book, Seventh Edition, September 2011, [usamriid.army.mil/education/instruct.cfm](http://usamriid.army.mil/education/instruct.cfm)

