

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 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

