

## BOTULISM EMERGENCY INFORMATION: TRANSMISSION, PREVENTION, & INFECTION CONTROL

<b>WHAT IS BOTULISM?</b>	<ul style="list-style-type: none"> <li>Caused by <i>Clostridium botulinum</i>, a bacterium that is an anaerobic, spore-forming, Gram-positive rod</li> <li>Produces 7 toxins, 4 of which cause disease in humans</li> <li>Symptoms in food-borne botulism include nausea, vomiting, diarrhea, and abdominal cramps; these GI symptoms would <b>not</b> occur in a aerosol exposure</li> <li>Neurological symptoms include blurred vision, diplopia, ptosis, dilated sluggishly reactive pupils, progressive symmetric descending flaccid paralysis eventually requiring ventilation support for respirations; Autonomic symptoms include dry mouth, ileus, constipation, &amp; urinary retention</li> <li>Botulinum toxin is one of the most potent toxins known and even minute quantities can cause disease; Any suspected case is a public health emergency</li> </ul>	
<b>TRANSMISSION &amp; INCUBATION</b>	<ul style="list-style-type: none"> <li>Person to person transmission does NOT occur</li> <li>Incubation period in food-borne botulism is usually 12-72 hours but may be as short as 6 hours or as long as 10 days depending on quantity of exposure</li> <li>In the event of bio-aerosol release, toxin may be present on patient's skin, clothes, or other objects that could serve as a source of potential secondary cases.</li> </ul>	
<b>HOW LONG CAN BOTULISM BACTERIA EXIST IN THE ENVIRONMENT?</b>	<ul style="list-style-type: none"> <li>Sunlight inactivates toxin in 1-3 hours as well as heating to 100o C for 1 minute, 85o C for 5 minutes, or 80o C for 20 minutes .</li> <li>In an aerosolized event and depending on weather conditions, inactivation may take as long as 2 days</li> </ul>	
<b>DECONTAMINATION</b>	<ul style="list-style-type: none"> <li>Yes, if recent aerosol exposure is suspected</li> <li>Patient/Companion remove clothes and place in red Biohazard Bag</li> </ul>	
<b>POST-EXPOSURE PROPHYLAXIS and TREATMENT</b>	<ul style="list-style-type: none"> <li>Trivalent antitoxin (types A, B, &amp; E) can be administered within 24 hours after onset of illness or before symptoms occur</li> <li>Skin testing for hypersensitive reaction is required before administration</li> <li>Use of antitoxin for post-exposure prophylaxis is limited by its scarcity</li> </ul>	
<b>PRECAUTIONS FOR STAFF WITHOUT PATIENT CONTACT</b>	<ul style="list-style-type: none"> <li>No special precautions or prophylaxis are recommended for staff who have no contact with patients or their immediate environment such as materials and equipment associated with their care</li> </ul>	
<b>PRECAUTIONS FOR STAFF WITH PATIENT CONTACT</b>	<b>PRE-DECONTAMINATION</b> <ul style="list-style-type: none"> <li>Surgical mask with goggles or face shield</li> <li>Gloves</li> <li>Long-sleeved gown</li> <li>HCW leaves gown, gloves, &amp; mask in red biohazard bag</li> <li>Hand-washing or alcohol gel</li> </ul>	<b>POST-DECONTAMINATION</b> <ul style="list-style-type: none"> <li>Gloves</li> <li>Long-sleeved gown</li> </ul>
	<ul style="list-style-type: none"> <li><b>Extreme care must be exercised not to touch one's own mucous membranes or conjunctivae with hands or gloves which may be contaminated with small amounts of toxin.</b></li> </ul>	
<b>PATIENT PRECAUTIONS</b>	<ul style="list-style-type: none"> <li>Standard precautions post decontamination</li> </ul>	
<b>ENVIRONMENTAL PRECAUTIONS</b>	<ul style="list-style-type: none"> <li>Linens and disposable items used during evaluation (gowns, gloves,etc) should be placed in red biohazard bags and disposed of in biological waste containers</li> <li>Non-disposable items used during evaluation (blood pressure cuffs, stethoscopes, etc) should be carefully disinfected with a 0.5% hypochlorite bleach solution before reuse</li> <li>The room where the patient was evaluated, including all fixtures and instruments in the room, should be cleaned with a 0.5% hypochlorite bleach solution.</li> </ul>	