

OPH: 800-256-2748		<h1>Botulism</h1>	CDC EOC Anti-Toxin 770-488-7100 Ask for Botulism Officer in charge CDC Day 404-639-2206 or 639-2888
<b>Classification</b>	Foodborne, infant, wound, adult intestinal (rare), iatrogenic & WMD.		
<b>Mechanism</b>	1-Ingestion of preformed toxin, 2-Inhalation of preformed toxin, 3-Local production of toxin by <i>C. botulinum</i> organisms in the gastrointestinal tract, 4-Local production of toxin by <i>C. botulinum</i> organisms in devitalized tissue at the site of a wound		
<b>Incubation Period</b>	1-Foodborne botulism 12 to 36 hours (range, 6 hours to 10 days); 2-Wound botulism, 4 to 14 days(injury →onset); 3-Infant botulism 3 to 30 days (exposure to spore-containing honey or other food →onset)		
<b>Clinical</b>	Acute, afebrile symmetric, descending, flaccid paralysis. Fatigue, dizziness, dysphagia, dysarthria, diplopia, dry mouth, dyspnea, ptosis, ophthalmoparesis, tongue weakness, facial muscle paresis. No areflexia until affected muscle completely paralyzed.		
<b>Clinical Infant botulism</b>	<6 months; poor feeding, droopy eyelids, constipation, lethargy, bulbar palsies, hypotonia, weakness and loss of head control		
<b>Differential</b>	Myasthenia gravis & Eaton-Lambert myasthenic syndrome (LEMS) = Edrophonium test; Tick paralysis; Acute inflammatory demyelinating polyneuropathy (AIPN; Guillain-Barré syndrome) = sensory complaints, rapidly areflexic, rarely begins with cranial nerve dysfunction; Magnesium intoxication.		
<b>Toxin Types</b>	Human = A,B,E,F; Type A = west U.S.; Type B = east U.S.; Type E = fish; Types C & D=birds and mammals; Infant = types A & B		
<b>Lab Diagnosis</b>	1-Demonstrate <i>C. botulinum</i> organisms; 2-Demonstrate the presence of toxin in feces, wound exudate or tissue samples; Gold standard for toxin assay = mouse protection bioassay (MPB); neutralization test -Stool and blood specimens →OPH Central Laboratory→ CDC. Stool specimens (1-2 gms) are to be collected in a clean container (no preservatives) and kept refrigerated. -Serum specimens (at least 1 cc) are to be collected in a red-topped tube and either spun down and sera sent or the whole blood sent refrigerated. <u>PCR</u> detect gene for botulinum toxin, not the toxin itself, type specific. Cannot measure if toxin expressed. <u>Serology</u> not very useful for diagnosis; small amounts of toxin involved; survivors rarely develop antibodies. Immunoprecipitation assay (IPA) compares favorably with MPB. Serologic tests are available from several laboratories (NorthWest Pacific Lab, Berkeley, CA).		
<b>Treatment</b>	<u>To obtain antitoxin call the CDC directly.</u> A CDC staff member will ask questions to determine whether antitoxin therapy is indicated Primary number: 770-488-7100 CDC Emergency Operations Center and ask for the Botulism Officer In Charge; Alternate numbers: 404-639-2206 during workdays, or 404-639-2888 other times <u>To obtain BabyBIG®</u> suspect infant botulism, contact the Infant Botulism Treatment & Prevention Program (IBTPP) on-call physician at (510) 231-7600 to review indications; inquiring physicians should use read IBTPP's internal programmatic checklist as a guide		