

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
Classification	Foodborne, infant, wound, adult intestinal (rare), iatrogenic & WMD.		
Mechanism	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		
Incubation period	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)		
Clinical	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.		
Clinical infant botulism	<6 months; poor feeding, droopy eyelids, constipation, lethargy, bulbar palsies, hypotonia, weakness and loss of head control		
Differential	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.		
Toxins types	Human = A,B,E,F; Type A = west US; Type B = east US; Type E = fish; Types C & D=birds and mammals; Infant = types A & B;		
Lab diagnosis	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).		
Treatment	To obtain antitoxin call directly the CDC. 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 To obtain BabyBIG® 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		