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Physician Instructions for *C. botulinum* Toxin Detection in Adult Specimens

- Notify:** Contact the San Francisco Department of Public Health (SFDPH) on each case of suspected botulism for which specimens will be collected.

NOTE: The patient's physician must have discussed the case and received approval for submission of specimens from the SFDPH, Communicable Disease Control Unit at (415) 554-2830. The patient's physician will then be contacted by the State's Communicable Disease Control Duty Officer of the Day for approval PRIOR to submission of specimens.

Background: Botulism toxin detection is an "in-vivo reference test". Time to a positive result varies with the specimen and the toxin concentration. After testing begins, typical cases may be confirmed within 4 days; others may take 15 days. Patient management and antitoxin administration should be based on clinical findings and not await lab results.

Keep all specimens under refrigeration. A prolonged holding time above 20 C or exposure to heat may degrade the toxin to undetectable levels. **Do not freeze any specimens.**

- Interfering drugs: cholinesterase inhibitors, ie. ambenonium, neostigmine, pyridostigmine (Mestinon/Timespan), edrophonium (Tensilon). Sera containing these drugs require additional analytical or procedure time. Record on the lab submittal form and notify the health department **PRIOR** to submission of specimens, if the patient received any of these interfering drugs.
- Pre-antitoxin: Draw 30 ml of whole blood from a free flowing site. Label the blood with the patient's name, "pre-antitoxin" serum, date and time collected. Refrigerate.
- Feces or enema or gastric aspirate: When recommended by the public health epidemiologist, collect 25 gm feces unpreserved or 25 ml from a sterile water enema. In some cases, a 25 ml gastric aspirate, obtained within 72 hours of symptom onset, is appropriate. Refrigerate.
- Specimen submission:** The hospital lab should centrifuge and separate the clot from the serum. Specimens should be packaged to remain at 4-10 C during travel to the SFDPH Public Health Laboratory . Do not use dry ice or place cold packs in direct contact with specimens. Hemolyzed or low volume sera will not be tested. Allow 2-4 days transit time before testing is begun at the state reference laboratory.
- Specimen Submission Form:** Physicians should complete appropriate hospital requisition forms. Labs should complete the SFDPH Laboratory Specimen Submission Form available at <http://www.sfdcp.org/index.cfm?id=16> and submit with specimen to SFDPH.
- Results:** Positive results will be phoned to the physician by the SFDPH, Communicable Disease Control.