

<b>Title</b>	<b>Corynebacterium diphtheriae</b>
<b>Specimen Requirements</b>	<ol style="list-style-type: none"> <li>1. Specimen type: Throat swab and nasopharyngeal specimens are recommended for respiratory illness. Pseudo-membrane tissue may also be collected and submitted.</li> <li>2. For suspected carriers, a nasopharyngeal specimen should be obtained.</li> <li>3. For cutaneous diphtheria it's recommended to collect skin/wound, throat, and nasopharyngeal specimens.</li> <li>4. Temperature requirement: Ambient conditions, except tissue samples should be kept cool (5°C-15°C).</li> </ol>
<b>Sampling Materials</b>	<ol style="list-style-type: none"> <li>1. Swab: Use a synthetic type (polyester, Dacron, Rayon).</li> <li>2. Calcium alginate tipped swabs are unacceptable.</li> </ol> <p>For transport of collected specimens, use one of the following:</p> <ol style="list-style-type: none"> <li>1. Amies or Stuart transport medium, commercially available.</li> <li>2. Loefflers/Pai slant tubed medium with screw-cap.</li> <li>3. Screw-cap sterile tube.</li> <li>4. Tissue in sterile saline (no formalin) within a sterile screw-cap container.</li> <li>5. Shipping boxes/containers with appropriate shipping labels, commercially available.</li> </ol>
<b>Procedural Notes</b>	<p>Specimen collection:</p> <ol style="list-style-type: none"> <li>1. Collection of Nasopharyngeal Swab: Insert the polyester-tipped swab through the nostril into the nasopharynx until the tip reaches the distance equivalent to that from the ear to the nostril of the patient. Rotate the swab several times, remove, and place each swab into the commercial transport medium. Label the container with source, patient name, and collection date.</li> <li>2. Collection of Throat Swab: Depress tongue with tongue depressor, collect specimen from the posterior pharynx/pseudo-membrane, tonsils, and/or inflamed areas with a sterile swab. Place the swab into the commercial transport medium, label the container with the source, patient name, and collection date. Pieces of pseudo-membrane may also be submitted for testing. Pseudo-membrane should be placed in sterile saline (not formalin) and shipped overnight with ice packs.</li> <li>3. Collection of Skin/Wound Swab: <ol style="list-style-type: none"> <li>a. After proper disinfection/cleansing of the area, lightly moisten the swab(s) tip with sterile saline, roll the swab 5-6 times directly at the area of pus/inflamed tissue. Place the swab into the commercial transport medium, label the container with the source, patient name, and collection date.</li> <li>b. This type of specimen may be submitted as an aspirate for open/closed wounds, collecting the sample at the deepest site of the lesion/exudate and/or at the advancing margin of the lesion. Label the sample container/transport medium with the source, patient name, and collection date.</li> </ol> </li> </ol> <p>Submission:</p> <ol style="list-style-type: none"> <li>1. Be sure to properly label the culture tube with the patient's name, date of collection and site/source particularly when submitting multiple specimens.</li> <li>2. Check the expiration date on the transport tube to ensure the product is acceptable and will continue to be acceptable once received at the ISDH laboratory.</li> <li>3. Category B UN3373, Triple contained in accordance with federal shipping regulations for infectious agents</li> <li>4. Complete a Reference Bacteriology Culture Identification request form for each specimen with the following information: <ol style="list-style-type: none"> <li>a. Patient name, address, age, gender, onset, physician name, and diagnosis.</li> <li>b. Culture isolation source, date isolated, date submitted, organism suspected.</li> <li>c. Submitting facility information-clinic name, address, phone number, fax number, contact name, and email address (if available).</li> <li>d. Relevant comments which may include patient history or travel history.</li> </ol> </li> <li>5. Isolate Handling: Infectious agent, Biosafety level 2.</li> <li>6. Submitter eligibility: Prior Approval by ISDH Epidemiology SID 317-233-7112</li> </ol>
<b>Shipping Instructions</b>	<p>Ship To: Indiana State Department of Health</p>

Laboratories

550 West 16th Street  
Indianapolis, IN. 46202

1. Package according to Category B UN3373 triple contained in accordance with federal shipping regulations for infectious substances/diagnostic specimens.
2. Tighten the specimen container tube caps.
3. Label clearly on each specimen tube with the patient name, collection date, and site/source.
4. Wrap each labeled, primary/specimen container tube with absorbent material. Place each primary container tube with absorbent material into the inner mailing container and tighten the cap securely.
5. The completed submission/request form may then be wrapped around the sealed inner container and together placed securely into the outer shipping container.
6. Clearly label the outer container with the senders name/address and recipients name/address.
7. Do not send culture isolates on petri plates if submitting by mail.
8. Transport Temperature: Ambient conditions for all specimens except tissue specimens should be transported with cold packs.
9. ISDH recommends that the collected specimens for Diphtheria testing are received in 24 hours or less by using an overnight delivery or courier service.

**Reporting  
and TAT**

1. Reporting method: Fax, Mail, Email, Phone call.
2. TAT: 3-16 business days.
3. Test Referral: Cultures presumptively identified as *Corynebacterium diphtheriae* or suspected, will be sent to the CDC for confirmation.
4. If clinical symptoms are indicative of diphtheria infection, a specimen should be submitted to the CDC for PCR studies with approval from the CDC/ISDH.