CRITICAL EYE SPECIMEN COLLECTION

Acceptable sources
- Vitreous/aqueous, anterior chamber, orbital or washing fluid, corneal ulcer/scrapings, biopsy tissue, lacrimal gland/canal
- Enucleation, intraocular and other non-routine specimens
- Contact lens or contact lens solution

NOTE:
- Corneal scraping or contact lens are the specimen of choice for Acanthamoeba.
- Swabs (conjunctival/corneal) are not considered critical eye specimens. For information regarding collection of routine eye specimens refer to page 3 of this guideline or CLS Guide to Services.

Materials Required
- Appropriate Microbiology transport media, collection kit and/or culture media; refer to Critical Eye Specimen Collection Containers section of this guideline (page 2).
- Microbiology culture media kits and slides are available from CLS Microbiology using the Corneal Scraping Bedside Media Kit Supply Order Form MI6133 (www.calgarylabservices.com/medical-professionals/forms-supplies/ordering.aspx).
- Check the expiry dates of all media/kits before use.

Specimen Collection
- Collect sample aseptically and submit in a sterile container; fluid aspirates for bacterial culture may be injected aseptically through the stopper into anaerobic transport media (PRAS). For more information regarding collection containers and media to be used; refer to Critical Eye Specimen Collection Containers section of this guideline (page 2).
- Do NOT submit specimens in collection syringe.
- If inoculating the media at the bedside then inoculate the appropriate media according to testing required within one hour of collection.
- Seal all inoculated containers using parafilm provided in the kit.

Labelling the Sample
- Label all sample containers and media with:
  - The patient’s full first and last name, Personal Health Number (PHN/ULI) or Government issued identification (Military, Federal, RCMP, Immigration), date and time of collection and source/site
  - If a patient demographic label is available, attach this label to the outside of the container
  - Ensure the slides are labelled (not slide container) with the patient’s full first and last name. If only one slide collected, indicate on slide or requisition the requested test (gram or fungal staining).

Lab Requisition
- Complete the “Eye: Critical” section of the CLS Microbiology Requisition REQ9021MI for Bacterial, Fungal, and/or Acanthamoeba culture.
- Complete the ProvLab Serology and Molecular Testing Requisition for Viral and/or AFB studies.
- Print the date and time the sample was collected on the requisition.
- Fold and place the requisition(s) in the outside pocket of the plastic re-sealable bag. Do not put the requisition in the bag with the sample collection container.

Sample Delivery to Lab
- Store and transport specimens and inoculated media and slides at room temperature (RT).
- Transport to the laboratory immediately.

Questions?
- Call the Laboratory Information Centre at 403-770-3600 or
- Refer to CLS Guide to Services (www.calgarylabservices.com) or
- Refer to ProvLab Guide to Services (www.albertahealthservices.ca/lab/Page3317.aspx)
# CRITICAL EYE SPECIMEN COLLECTION CONTAINERS
(Fluids, Scrapings, Tissues, Contact Lenses)

<table>
<thead>
<tr>
<th>Specimen</th>
<th>Test Required</th>
<th>Collection Container</th>
<th>Notes</th>
</tr>
</thead>
</table>
| Vitreous/ aqueous fluid         | Bacterial culture      | PRAS (Pre-Reduced Anaerobic Sterilized) Transport Media: Use to collect Fluids <5 mL. Inject collected fluid through the vial stopper. | Media to Inoculate at Bedside:  
|                                 |                        |                                           |  
| Corneal scraping                |                        |                                           | Blood agar plate  
| Tissue                          |                        |                                           | Chocolate agar  
| Other fluid                     |                        |                                           | Thioglycollate broth  
|                                 |                        |                                           | Slide for gram stain  
| Fungal Culture                  |                        | Sterile Container (all specimens)         | Media to Inoculate at Bedside:  
|                                 |                        |                                           | Inhibitory Mold Agar (IMA)  
|                                 |                        |                                           | Slide for Calcofluor white stain. Submit a second slide if both gram and fungal stains required.  
| Mycobacteria culture            |                        | Sterile Container (all specimens)         | Dedicated specimen and ProvLab requisition required. Testing performed at ProvLab.  
| (Acid-fast bacilli, AFB)        |                        |                                           |                                                                |
| Vitreous/ aqueous fluid         | Acanthamoeba culture   | Submit specimen in sterile container with 10 mL Pages Amoeba Saline |                                                                |
| Corneal scraping                |                        |                                           |                                                                |
| Tissue                          |                        |                                           |                                                                |
| Other fluid                     |                        |                                           |                                                                |
| Contact lens                    |                        |                                           |                                                                |
| Contact lens solution           |                        |                                           |                                                                |
| Viral conjunctivitis panel      |                        | Universal Transport Medium (UTM)          | Dedicated specimen and ProvLab requisition required. Testing performed at ProvLab.  
|                                 |                        |                                           |                                                                |
| Chorioretinitis Panel           |                        | Sterile Container                        | Dedicated specimen and ProvLab requisition required. Testing performed at ProvLab.  
|                                 |                        |                                           |                                                                |
ROUTINE EYE SPECIMEN COLLECTION

Acceptable sources
- Conjunctival/corneal swab.

Specimen Collection
- Collect samples using appropriate collections swabs; refer to Routine Eye Specimen Collection Containers section of this guideline (below).
- **Inoculation at bedside is not required.** If inoculating the media at the bedside then inoculate the appropriate media according to testing required within one hour of collection and transport to the lab immediately.

Labelling the Sample
Label all sample containers and media with:
- The patient’s full first and last name, Personal Health Number (PHN/ULI) or Government issued identification (Military, Federal, RCMP, Immigration), date and time of collection and source/site
- If a patient demographic label is available, attach this label to the outside of the container

Lab Requisition
- Complete the “Eye: Routine” section of the CLS Microbiology Requisition REQ9021MI for Bacterial culture.
- Complete the ProvLab Serology and Molecular Testing Requisition for Viral studies.
- Print the date and time the sample was collected on the requisition.
- **Fold** and place the requisition(s) in the outside pocket of the plastic resealable bag. **Do not** put the requisition in the bag with the sample collection container.

### ROUTINE EYE SPECIMEN COLLECTION CONTAINERS (Swabs)

<table>
<thead>
<tr>
<th>Specimen</th>
<th>Test Required</th>
<th>Collection Container</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conjunctival swab</td>
<td>Bacterial Culture</td>
<td>Liquid Amies Swab (Red lid)</td>
<td>Direct bedside inoculation of media/slides is not required.</td>
</tr>
<tr>
<td>Corneal swab</td>
<td>Gonorhera Culture</td>
<td>Liquid Amies Swab (Red lid)</td>
<td>Performed only if &lt;3 months old, treatment failure, sexual exposure/assault, environmental exposure</td>
</tr>
<tr>
<td>Chlamydia/ Gonorrhrea NAAT</td>
<td></td>
<td>APTIMA Unisex blue swab</td>
<td>Dedicated specimen required. Testing performed at ProvLab. ProvLab requisition required.</td>
</tr>
<tr>
<td>Viral conjunctivitis panel</td>
<td>Viral conjunctivitis panel</td>
<td>Universal Transport Medium (UTM)</td>
<td></td>
</tr>
</tbody>
</table>

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