Policy #:	606 (PLH-606-05)	**Effective Date:**	9/30/2004	**Reviewed Date:**	8/1/2016
Subject:	COLLECTION AND TRANSPORT OF OCULAR SPECIMENS FOR CULTURE				
Approved by: Laboratory Director, Jerry Barker (electronic signature)					
Approved by: Laboratory Medical Director, Mark P. Burton, MD (electronic signature)					
Approved by: Affiliate Lab Medical Director, Chris Giampapa, MD (electronic signature)					
Approved by: Affiliate Lab Medical Director, Paul J. Sims, MD (electronic signature)					
Approved by: Affiliate Lab Medical Director, F.E. Williamson, MD (electronic signature)					

COLLECTION AND TRANSPORT OF OCULAR SPECIMENS FOR CULTURE

General Consideration

1. Obtain samples for viral cultures with a Dacron or cotton tipped swab. Submit in VTM or equivalent. Do not use calcium alginate swabs or swabs with wooden shafts. Send prepared smears and specimen collected in VTM or chlamydia transport media to the laboratory immediately. Best recovery is obtained when the specimens are transported to the laboratory on wet ice.

Conjunctival scrapings

1. Collect before anesthetic application.
2. If possible, sample both conjunctivae to determine indigenous bacteria.
3. Scrape the lower tarsal conjunctiva with a sterilized kimura spatula.
4. Inoculate the appropriate media directly.
5. Prepare smears by applying the scraping over 1 to 2 cm area to a clean glass slide.
6. Alternatively, use a Dacron or cotton-tipped culturette to swab the inferior tarsal conjunctiva (inside surface of eyelid) and the fornix of the eye. However, organisms are more readily detected in scrapings than from a swab.

Corneal scrapings

1. Obtain conjunctival samples prior to corneal scrapings. Sometimes conjunctival cultures are helpful in assessing the possibility of contamination of corneal cultures.
2. One or 2 drops of topical anesthetic are generally instilled.
3. Using short, firm strokes in one direction scrape multiple areas of ulceration and suppuration with a sterilized kimura spatula. (Keep the eyelid open, and be careful not to touch the eyelashes.)
4. Inoculate each scraping directly to appropriate media. (Multiple scrapings are recommended because the depth and extent of viable organisms may vary.)

5. Prepare smears by applying the scraping in a gentle circular motion over a clean glass slide or by compressing material between two clean glass slides and pulling slides apart.

Intraocular fluid

2. Use a needle aspiration technique to collect intraocular fluid.
3. Inoculate appropriate media directly, and/or immediately transport the samples to the laboratory in a sterile transport system or a capped syringe with air bubbles expelled.
4. Prepare smears by spreading a drop of material over the surface of a cleaned glass slide with a sterile Kimura spatula or by compressing the material between two glass slides and pulling the slides apart.
5. Do not use wooden shaft and calcium alginate swabs to collect specimens for viral cultures. Best recovery is obtained when the specimens are transported to the laboratory on wet ice.

Reference:

Versalovic,James (Editor in Chief), editors Karen C, Carroll, Guido Funke, James H. Jorgenson, Marie Louise Landry, David W. Warnock, 2011. 10th Edition. Manual of Clinical Microbiology, American Society for Microbiology, Washington, D.C.