



MEMORANDUM

DATE: August 28, 2024

TO: All users of Acanthamoeba testing at BCCDC

RE: Sample collection procedure for Acanthamoeba diagnostic testing from ocular samples

Dear colleagues,

The BCCDC Public Health Laboratory (PHL) Parasitology Laboratory is updating its recommendations on ocular sampling for the diagnosis of Acanthamoeba to standardize reagents and procedures. As is familiar to many of you, the PHL offers two main diagnostic options for detection of *Acanthamoeba* spp.: culture on specialized media, and a polymerase chain reaction (PCR). We request your support for parallel sample collection to enable us to complete the work to fully validate the Acanthamoeba PCR with commercial media, including the Copan eSwab and commercial phosphate buffered saline (PBS) tubes. Any testing supplies can be requested by email bccdc_para@phsa.ca or by calling the Parasitology Laboratory at (604) 707-2629.

A summary of the procedure is outlined below, and detailed instructions are attached to this document.

- 1. Acanthamoeba culture:** Continue with current process, with culture plates provided in advance by PHL. Please do not use expired plates as this may decrease sensitivity.
- 2. Acanthamoeba PCR:** Collect samples in parallel using a flocked swab with PBS tube, and with the eSwab collection kit. Please do not use cotton swabs as these may inhibit PCR.

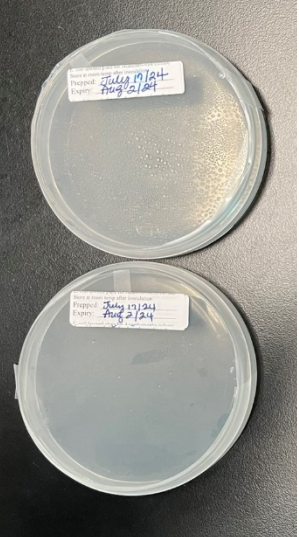


Thank you,

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Sample collection procedure	Culture	PCR	
<p>Instructions</p> <p>Please do not use expired <u>plates</u>, and return or discard <u>unused plates</u>. If you need a new supply of plates, please contact the lab.</p> <ol style="list-style-type: none"> Inoculate corneal scrapings directly onto the pre-lawned plate(s). Note: Do not use the same instrument once it has touched the surface of the plate as it will now be contaminated with bacteria. Place small identifier label on the edge of the bottom of the plate. Seal plate(s) with parafilm. Place plate(s) in biohazard bag. 	 <p>2 lawned plates</p>	 <p>1 PBS tube + 1 flocked swab</p>	 <p>1 eSwab collection kit</p> <ol style="list-style-type: none"> Inoculate flocked swab directly into the PBS tube. Break off the swab. Collect a second corneal swab using the eSwab collection system. Place tubes in biohazard bag. Keep tubes at room temperature.



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	5. Keep plate(s) at room temperature.	
Notes	<ul style="list-style-type: none">• Do not obscure inoculation area with label.• Check expiry date.• Keep at 4°C until use• Store at room temp after inoculation.• Discard unused plates.	<ul style="list-style-type: none">• Can collect either corneal scrapings or flocced swab as provided. Directly inoculate corneal scrapings into the tubes if using this method.