

DATE:	15 October 2025
TO:	Calgary and South Zone Physicians, Nursing Staff, and other Health Care Providers
FROM:	APL Calgary Microbiology
RE:	Change of Testing Methodology for Dermatophyte Detection

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message

- Effective **October 21, 2025**, APL in Calgary will begin testing for dermatophyte fungi from skin scraping and nail samples using nucleic acid amplification testing (NAT) methods including:
 - A laboratory-developed Pan-Dermatophyte polymerase chain reaction (PCR) Screening assay
 - A commercially available Dermatophyte PCR Identification assay for speciation when required
- Ongoing validation of hair samples will continue for 6-12 months, after which NAT will also be implemented for this specimen type if acceptable performance is demonstrated.

Background

- NAT methods are more sensitive and specific, less resource/labor intensive, and have significantly shorter turnaround times (≤ 7 days) compared to traditional microscopy and culture-based methods.

How this will impact you

- The Pan-Dermatophyte PCR screening assay:
 - Detects all dermatophyte genera including *Trichophyton* (*Arthroderma*), *Microsporum*, (*Nannizzia*, *Lophophyton*, *Paraphyton*), and *Epidermophyton*, but does NOT distinguish them
 - Does NOT detect any other mold or yeast that may cause dermatomycosis
- As dermatophytes are the primary pathogens of dermatomycosis and species identification does not usually impact treatment, most samples will only have testing done by Pan-Dermatophyte PCR Screen, indicating the presence or absence of dermatophyte DNA without speciation or culture for other fungi.
 - Dermatophyte PCR Identification will be performed when the Pan-Dermatophyte PCR Screen is positive on nail samples with clinical risk factors and all skin scraping samples.
 - Culture/Microscopy will be performed when the Pan-Dermatophyte PCR Screen is negative and risk factors for non-dermatophyte fungal infection are indicated or when NAT fails.
- NAT does not discern viable from non-viable fungi and may remain positive after treatment or cure.

Action Required

- If ordering using the [APL Microbiology Requisition](#):
- Ensure the latest version is being used: <https://www.albertahealthservices.ca/frm-20571.pdf>
 - Clinics should download/update to this version in their Electronic Medical Record systems.
- Select Fungal Screen/Culture (Dermatophytes) on the requisition and complete fields as required.
 - The specimen source should be clearly specified in the space provided.

Fungal
<input type="checkbox"/> Fungal Screen/Culture (<i>Dermatophytes</i>)
<input type="checkbox"/> Skin <input type="checkbox"/> Hair <input type="checkbox"/> Fingernail <input type="checkbox"/> Toenail (<i>specify</i>) _____
History <input type="checkbox"/> Treatment Failure <input type="checkbox"/> Immunocompromised
<input type="checkbox"/> Fungal Culture (<i>specify specimen type and body site</i>) _____

- If needed, indicate suspicion of non-dermatophyte mold (e.g. *Scopulariopsis*, *Neoscytalidium*) or yeast (e.g. *Candida*, *Malassezia*, *Trichosporon*) in the Clinical information/Suspect Organism field at the top.

