

PROGRAM Standard Operating Procedure – Laboratory Services	
Title: MIC32000 – Oral Culture	Policy Number:
Program Name: Laboratory Services	
Applicable Domain: Lab, DI and Pharmacy Services	
Additional Domain(s):	
Effective Date:	Next Review Date:
Issuing Authority: Director of Health Services	Date Approved:
Accreditation Canada Applicable Standard: N/A	

GUIDING PRINCIPLE:

Mouth swabs are usually obtained to identify oral yeast infections (thrush). Thrush is a common infection of the mouth and tongue caused by the yeast *Candida albicans*.

PURPOSE/RATIONALE:

This standard operating procedure describes the screening for *Candida albicans* in oral (mouth) specimens.

SCOPE/APPLICABILITY:

This procedure applies to Medical Laboratory Technologists (MLTs) processing specimens for oral culture.

SAMPLE INFORMATION:

Type	Swab <ul style="list-style-type: none"> • Amie’s with or without charcoal
Source	Mouth or tongue
Stability	If the sample is received in the laboratory and processed greater than 48 hours from collection: <ul style="list-style-type: none"> • Add specimen quality comment: “Delayed transport may adversely affect pathogen recovery”
Storage Requirements	Room temperature
Criteria for rejection	<ol style="list-style-type: none"> 1. Unlabeled/mislabeled swabs 2. Specimen container label does not match patient identification on requisition 3. Duplicate specimens obtained with same collection method within 24 hours

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REAGENTS and/or MEDIA:

- Sabouraud Dextrose agar (SAB)

SUPPLIES:

- Disposable inoculation needles
- Microscope slides
- Sterile saline
- Wooden sticks
- Coverslips

EQUIPMENT:

- Biosafety cabinet
- Microscope
- Vitek 2 and supplies

SPECIAL SAFETY PRECAUTIONS:

Containment Level 2 facilities, equipment, and operational practices for work involving infectious or potentially infectious materials or cultures:

- Ensure that appropriate hand hygiene practices be used
- Lab gown must be worn when performing activities with potential pathogens
- Gloves must be worn when direct skin contact with infected materials is unavoidable
- Eye protection must be used when there is a known or potential risk of exposure of splashes
- All procedures that may produce aerosols, or involve high concentrations or large volumes should be conducted in a biological safety cabinet (BSC)
- The use of needles, syringes and other sharp objects should be strictly limited

All patient specimens are assumed to be potentially infectious. Routine Practices must be followed. Since viable micro-organisms are used, all cultures must be handled with appropriate precautions. All equipment in contact with cultures should be decontaminated by appropriate methods.

QUALITY CONTROL:

- Refer to Test Manual for reagent quality control procedures

PROCEDURE INSTRUCTIONS:

Step	Action
Processing specimens for oral culture	
1	In the biosafety cabinet: <ul style="list-style-type: none">• Inoculate SAB with the swab• Ensure all surfaces of the swab make contact with the agar• Streak for isolated growth using a disposable inoculation needle• Write on the plate the date of the 48 hour read
2	Incubate the media: <ul style="list-style-type: none">• Place SAB on the appropriate workbench

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INTERPRETATION OF RESULTS:

Step	Action	
1	<ul style="list-style-type: none"> Observe SAB plate at 48 hours Examine for white, creamy colonies resembling yeast 	
2	If no colonies resembling yeast are seen at 48 hours: <ul style="list-style-type: none"> Record observations in the LIS Workup complete No yeast isolated 	
3	If colonies resembling yeast are seen: <ul style="list-style-type: none"> Record observations in the LIS Perform a wet prep of the colonies 	
4	IF	THEN
	Wet prep NEGATIVE	<ul style="list-style-type: none"> Workup complete Yeast not isolated
	Wet prep POSITIVE	<ul style="list-style-type: none"> Perform Vitek 2 YST card

REPORTING INSTRUCTIONS:

IF	REPORT
Yeast not isolated	<ul style="list-style-type: none"> Report: "No Yeast Isolated"
Yeast Isolated, <i>Candida albicans</i>	<ul style="list-style-type: none"> Report organism identification List quantitation as "Isolated"
Yeast Isolated, not <i>Candida albicans</i>	<ul style="list-style-type: none"> Add isolate: "Yeast (NOT Candida species)" Use LIS OrgID: ystnot List quantitation as "Isolated"

LIMITATIONS:

- The Vitek 2 YST card provides an acceptable identification for *Candida* spp. and results can be reported as tested.
- If yeast other than *Candida* spp. are isolated, the identification should not be reported.

REFERENCES:

- Leber, A. (2016). *Clinical microbiology procedures handbook*. (4thed.) Washington, D.C.: ASM Press
- Jorgensen J.H., Pfaller M.A., Carroll K.C., Funke G., Landry M.L., Richter S.S., Warnock D.W. (2015). *Manual of Clinical Microbiology, 11th edition*. Washington, D.C: ASM Press

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APPROVAL:

Date

REVISION HISTORY:

REVISION	DATE	Description of Change	REQUESTED BY
1.0	06 Nov 17	Initial Release	L. Steven
2.0	04 Dec 18	Updated to include new Vitek 2 instrument	L. Steven
3.0	31 Dec 21	Procedure reviewed and added to NTHSSA policy template	L. Steven

DRAFT

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