

<b>PROGRAM Standard Operating Procedure – Laboratory Services</b>	
Title: MIC32000 – Oral Culture	Policy Number: 15-137-V1
Program Name: Laboratory Services	
Applicable Domain: Lab, DI and Pharmacy Services	
Additional Domain(s): N/A	
Effective Date: 17/03/2021	Next Review Date: 17/03/2023
Issuing Authority: Director of Health Services	Date Approved: 17/03/2021
Accreditation Canada Applicable Standard: N/A	

**GUIDING PRINCIPLE:**

Mouth swabs are usually obtained in order to identify oral yeast infections (thrush). Thrush is a common infection of the mouth and tongue caused by the yeast *Candida albicans*. Thrush appears as white patches that look like cottage cheese or milk curds.

**PURPOSE/RATIONALE:**

To determine the presence or absence of yeast (thrush) in oral specimens.

**SCOPE/APPLICABILITY:**

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

**SAMPLE INFORMATION:**

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

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### REAGENTS and/or MEDIA:

- Sabouraud Dextrose (SAB) agar

### SUPPLIES:

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

### EQUIPMENT

- Biosafety cabinet
- Vitek 2 and supplies

### SPECIAL SAFETY PRECAUTIONS:

Containment Level 2 facilities, equipment, and operational practices for work involving infectious or potential 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
<b>Processing specimens for oral culture</b>	
1	In the biosafety cabinet: <ul style="list-style-type: none"><li>• Inoculate SAB with the swab</li><li>• Ensure all surfaces of swab make contact with the agar</li><li>• Streak for isolated growth using a disposable inoculation needle</li><li>• Write on the plate the date of the 48 hour read:<ul style="list-style-type: none"><li>➤ <b>R</b> (for read) followed by the read date (48 hours)</li></ul></li></ul>

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<b>2</b>	Incubate the media: <ul style="list-style-type: none"> <li>Place SAB on the workbench</li> </ul>
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**INTERPRETATION OF RESULTS:**

Step	Action	
<b>1</b>	<ul style="list-style-type: none"> <li>Observe SAB plate at 48 hours</li> <li>Examine for white, creamy colonies resembling yeast</li> </ul>	
<b>2</b>	<b>IF</b>	<b>THEN</b>
	Colonies resembling yeast NOT seen	<ul style="list-style-type: none"> <li>Workup complete</li> <li>Yeast not isolated</li> </ul>
	Colonies resembling yeast seen	<ul style="list-style-type: none"> <li>Perform wet prep</li> </ul>
<b>3</b>	<b>IF</b>	<b>THEN</b>
	Wet prep NEGATIVE	<ul style="list-style-type: none"> <li>Workup complete</li> <li>Yeast not isolated</li> </ul>
	Wet prep POSITIVE	<ul style="list-style-type: none"> <li>Perform Vitek 2 YST card</li> </ul>

**REPORTING INSTRUCTIONS:**

IF	REPORT
Yeast not isolated	<ul style="list-style-type: none"> <li>Report: <b>"No Yeast Isolated"</b></li> </ul>
Yeast Isolated, Candida albicans	<ul style="list-style-type: none"> <li>Report: <b>"Candida albicans"</b></li> <li>List quantitation as <b>"Isolated"</b></li> </ul>
Yeast Isolated, not Candida albicans	<ul style="list-style-type: none"> <li>Report: <b>"Yeast (NOT Candida albicans)"</b></li> <li>List quantitation as <b>"Isolated"</b></li> </ul>

**REFERENCES:**

- Leber, A. (2016). *Clinical microbiology procedures handbook*. (4<sup>th</sup>ed.) 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, 11<sup>th</sup> edition*. Washington, D.C: ASM Press

**APPROVAL:**

March 17, 2021

Date

  
 Director, Health Services

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**REVISION HISTORY:**

<b>REVISION</b>	<b>DATE</b>	<b>Description of Change</b>	<b>REQUESTED BY</b>
1.0	06 Nov 17	Initial Release	L. Steven
2.0	30 Nov 18	Updated to include new Vitek 2 instrument	L. Steven
3.0	11 Jan 21	Procedure reviewed and added to NTHSSA policy template	L. Steven

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