

| 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*. 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:

| | |
|-------------------------------|--|
| Type | Swab • 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: • Add specimen quality comment: “Delayed transport may adversely affect pathogen recovery” |
| Storage Requirements | Room temperature |
| Criteria for rejection | 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 (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 |
|--|---|
| 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 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 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 | THEN |
| | Colonies resembling yeast NOT seen | <ul style="list-style-type: none"> Workup complete Yeast not isolated |
| 3 | 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, Candida albicans | <ul style="list-style-type: none"> Report: "Candida albicans" List quantitation as "Isolated" |
| Yeast Isolated, not Candida albicans | <ul style="list-style-type: none"> Report: "Yeast (NOT Candida albicans)" List quantitation as "Isolated" |

REFERENCES:

1. Leber, A. (2016). *Clinical microbiology procedures handbook*. (4thed.) Washington, D.C.: ASM Press
2. 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 | 11 Jan 21 | Procedure reviewed and added to NTHSSA policy template | L. Steven |
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DRAFT

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