PROGRAM Standard Operating Procedure – Laboratory Services	
Title: MIC32100 – Yeast Culture	Policy Number:
Program Name: Laboratory Services	
Applicable Domain: Lab, DI and Pharmacy Services	
Additional Domain(s): NA	
Effective Date:	Next Review Date:
Issuing Authority: Director, Laboratory and Diagnostic Imaging Services	Date Approved:
Accreditation Canada Applicable Standard: NA	

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GUIDING PRINCIPLE:
Yeast cultures are performed to identify yeast in select specimens. Yeast isolates are identified and reported based on clinical significance in the location of isolation.

PURPOSE/RATIONALE:
This standard operating procedure describes the screening for *Candida albicans* in anal, penis, cervical and vaginal specimens.

SCOPE/APPLICABILITY:
This procedure applies to Medical Laboratory Technologists (MLTs) processing specimens for yeast culture.

SAMPLE INFORMATION:

Type	Swab • Amie's with or without charcoal
Source	• Anus • Penis • Cervix • Vagina
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. Vaginal swab without appropriate clinical history

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 yeast culture	
1	In the biosafety cabinet: • 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: • Place SAB on the appropriate workbench

INTERPRETATION OF RESULTS:

Step	Action	
1	• Observe SAB plate at 48 hours • Examine for white, creamy colonies resembling yeast	
2	If no colonies resembling yeast are seen at 48 hours: • Record observations in the LIS • Workup complete • No yeast isolated	
3	If colonies resembling yeast are seen: • Record observations in the LIS • Perform a wet prep of the colonies	
4	**IF**	**THEN**
	Wet prep NEGATIVE	• Workup complete • Yeast not isolated
	Wet prep POSITIVE	• Perform VITEK 2 YST card

REPORTING INSTRUCTIONS:

IF	REPORT
Yeast not isolated	• Report: "**No Yeast Isolated"**
Yeast Isolated, *Candida albicans*	• Report organism identification • List quantitation as **"Isolated"**
Yeast Isolated, not *Candida albicans*	• Add isolate: **"Yeast (NOT Candida species)** • Use LIS OrgID: **ystnot** • List quantitation as **"Isolated"**

LIMITATIONS:

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

CROSS-REFERENCES:

NA

REFERENCES:

1. Leber, A. (2016). *Clinical microbiology procedures handbook.* (4th ed.) 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

APPROVAL:

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Date

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REVISION HISTORY:

REVISION	DATE	Description of Change	REQUESTED BY
1.0	31 Dec 21	Initial Release	L. Steven
2.0	21 Dec 23	Procedure reviewed	L. Steven