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	

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 yeast species in anal, penis, cervical and vaginal specimens.

SCOPE/APPLICABILITY:
This standard operating 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:

- Candi*Select* agar (YST)

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 MIC60040-Culture Media Quality Control procedure
- Refer to Test Manual for reagent quality control procedures

PROCEDURE INSTRUCTIONS:

Step	Action
Processing specimens for yeast culture	
1	In the biosafety cabinet: • Inoculate YST agar with the swab • Ensure all surfaces of the swab make contact with the agar • Streak for isolated growth using a disposable inoculation needle
2	• Label the YST plate with: R (Date + 2 day).

3	Incubate the media: • Place YST plate in the O_2 incubator on the "YST SCREEN" section on the old cultures shelf

INTERPRETATION OF RESULTS:

Step	Action	
1	• Observe YST plate at 48 hours • Examine for the presence of yeast growth, characterized by colored colonies on the agar	
2	If no colonies resembling yeast are seen at 48 hours: • Record observations in the LIS • Workup complete • No yeast isolated	
3	If purple/pink colonies are seen at 48 hours: • Record observations in the LIS • *Candida albicans* isolated	
4	If other coloured colonies resembling yeast are seen at 48 hours: • Record observations in the LIS • Perform a wet prep of the colonies	
5	**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* spp.	• Report organism identification • List quantitation as **"Isolated"**
Yeast Isolated, not *Candida* spp.	• 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:

- MIC60040-Culture Media Quality Control

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
3. Bio-Rad. (2014/10). *CandiSelect* package insert

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	31 Aug 23	Procedure reviewed	L. Steven
3.0	08 Aug 25	Procedure reviewed and updated to reflect new yeast agar Candi*Select*	L. Steven