Title: MIC32100-Yeast Culture

Issuing Authority: Director, Health Services

Next Review Date:

Type: Laboratory Services Program SOP

Policy Number: Date Approved:

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):		
Effective Date:	Next Review Date:	
Issuing Authority:	Date Approved:	
Director, Health Services		
Accreditation Canada Applicable Standard: N/A		

## **GUIDING PRINCIPLE:**

Yeast cultures are performed to identify yeast in select specimens. Yeast isolates are identified and reported based on their full identification and clinical significance in the location of isolation.

# **PURPOSE/RATIONALE:**

To determine the presence or absence of yeast in anal, penis, cervical and vaginal specimens.

## SCOPE/APPLICABILITY:

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

#### **SAMPLE INFORMATION:**

Туре	Swab  • Amie's with or without charcoal	
Source	<ul> <li>Anus</li> <li>Penis</li> <li>Cervix</li> <li>Vagina</li> </ul>	
Stability	<ul> <li>If the sample is received in the laboratory and processed greater than 48 hours from collection:</li> <li>Add specimen quality comment: "Delayed transport may adversely affect pathogen recovery"</li> </ul>	
Storage Requirements	Room temperature	
Criteria for rejection	<ol> <li>Unlabeled/mislabeled swabs</li> <li>Specimen container label does not match patient identification on requisition</li> </ol>	

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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 yeast culture		
1	<ul> <li>In the biosafety cabinet:</li> <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</li> </ul>	
2	Incubate the media:  • Place SAB on the workbench	

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## **INTERPRETATION OF RESULTS:**

Step	Action	
1	<ul> <li>Observe SAB plate at 48 hours</li> <li>Examine for white, creamy colonies resembling yeast</li> </ul>	
	IF THEN	
2	Colonies resembling yeast NOT seen	<ul><li>Workup complete</li><li>Yeast not isolated</li></ul>
	Colonies resembling yeast seen	Perform wet prep
	IF THEN	
3	Wet prep NEGATIVE	<ul><li>Workup complete</li><li>Yeast not isolated</li></ul>
	Wet prep POSITIVE	Perform Vitek 2 YST card

## **REPORTING INSTRUCTIONS:**

IF	REPORT
Yeast not isolated	Report: "No Yeast Isolated"
Yeast Isolated,	Report: "Candida albicans"
Candida albicans	List quantitation as "Isolated"
Yeast Isolated,	Report: "Yeast (NOT Candida albicans)"
not Candida albicans	<ul> <li>List quantitation as "Isolated"</li> </ul>

#### **REFERENCES:**

- 1. 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

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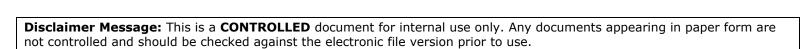
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APPROVAL:				
Date				

# **REVISION HISTORY:**

REVISION	DATE	Description of Change	REQUESTED BY
1.0	30 Jan 21	Initial Release	L. Steven



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