HEALTH HOLDING

HAFER ALBATIN HEALTH CLUSTER
MATERNITY AND CHILDREN HOSPITAL

Department:	Laboratory and Blood Bank (Microbiology)		
Document:	Internal Policy and Procedure		
Title:	Wound Swabs and Drainage Culture		
Applies To:	All Laboratory Staff		
Preparation Date:	January 05, 2025	**Index No:**	LB-IPP-137
Approval Date:	January 20, 2025	**Version :**	2
Effective Date:	February 20, 2025	**Replacement No.:**	LB-IPP-137(1)
Review Date:	February 20, 2028	**No. of Pages:**	03

1. PURPOSE:

1.1 To establish system and set responsibilities for processing wound swabs and drainage culture.

2. DEFINITIONS:

2.1 N/A

3. POLICY:

3.1 Specimens should be collected using a clean, sterile swab and sent in Amies transport medium. While drainage material should be collected into a clean, sterile container.

4. PROCEDURE:

4.1 **Direct examination (Gram stain):** Done from wound swab (without Charcoal) & drainage material. Comment on pus cells and organisms with quantitation.

4.2 **Inoculate the following culture media:**

Media:	Incubation:
Blood Agar (BA)	O2,35+2 °C x 48 hours
MacConkey Agar (MAC)	O2,35+2 °C x 48 hours
Chocolate Agar (CHOC)	CO2,35+2 °C x 48 hours
for surgical wound (If requested): Blood/ MacConkey's agar	anaerobic ,35+2 °C x 7 days.

4.2.1 Examine the plates after 24- and 48- hours incubation. Examine the anaerobic plates after 48 hours – 1 week for evidence of growth.

4.2.2 All isolates are to be identified as appropriate.

4.2.3 If no growth on aerobic culture plates but evidence of growth in anaerobic media then perform Gram stain and identify as appropriate.

4.3 **Interpretation of Culture:**

4.3.1 Growth of 3 types of coliforms or other Gram-negative bacilli will be reported as a negative report stating commensal flora including mixed Gram-negative bacilli".

4.3.2 Bite wounds:

4.3.2.1 Any growth of S. aureus, Pasteurella spp., Strept. milleri group, beta-hemolytic streptococci and Pseudomonas aeruginosa is significant.

4.3.2.2 For other organisms such as Enterobacteriaceae and other Gram-negative bacilli, a significant result is determined by the isolation of a moderate to heavy predominant growth, or if growth correlates with the predominant organism seen on Gram stain.

4.4 **Susceptibility Testing:** Refer to Susceptibility Testing Manual.

4.5 **Reporting Results:**

4.5.1 Negative report: "No growth" or "Commensal flora" "Commensal flora including mixed Gram-

negative bacilli".

4.5.2 Positive report: Report all significant isolates with appropriate sensitivities.

5. MATERIAL AND EQUIPMENT:

5.1 Routine culture media
5.2 Gram stain reagents
5.3 O2 & CO2 incubators
5.4 Microscan panels/ Vitek 2 system ID & AST cards
5.5 Anaerobic system (Jar & sachet)

6. RESPONSIBILITIES:

6.1 The assigned technician/ technologist for microbiology lab.
6.2 The C. Pathology Specialist/ Consultant.

7. APPENDICES:

7.1 Organisms encountered in postoperative wound infections

8. REFERENCES:

8.1 Procedure Manual, Toronto Medical laboratories / Mount Sinai Hospital department of microbiology.
8.2 Bailey & Scott's Diagnostic Microbiology. Feingold & Baron; 7th. Ed., C.V. Mosby Co. p. 301.
8.3 H.D. Isenberg. 2004. Specimen Collection, Transport and Acceptability p. 2.1.1 – 2.1.28. In Clinical Microbiology Procedures handbook, 2nd Edition, Vol 1 ASM Press, Washington, D.C.
8.4 H.D. Isenberg, 2004. Wound Cultures - Wound and Soft Tissue Cultures, p. 3.13.1.1 – 3.13.1.16. In Clinical Microbiology Procedures Handbook, 2nd Edition, Vol 1 ASM Press, Washington, D.C.
8.5 H.D. Isenberg. 2004. Culture for anaerobes p. 4.3.1 - 4.3.9 In Clinical Microbiology Procedures Handbook, 2nd Edition, Vol 1 ASM Press, Washington, D.C.

9. APPROVALS:

	Name	Title	Signature	Date
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Appendix 7.1

ORGANISMS ENCOUNTERED IN POSTOPERATIVE WOUND INFECTIONS

1. Staphylococcus aureus.
2. Coagulase negative staphylococci.
3. Streptococcus pyogenes.
4. Streptococcus milleri group.
5. Microaerobic Streptococci.
6. Enterococci: Proteus, Morganella, Providencia.
7. Other Enterobacteriaceae: E.coli, Pseudomonas spp.
8. Candida spp.
9. Bacteroid spp.
10. Prevotella & porphyromonas spp.
11. Fusobacterium spp.
12. Clostridium spp.
13. Peptostreptococcus spp.
14. Non spore forming bacilli, anaerobic, Gram positive rods