

Document Name:

Genital Culture – Group B Streptococcus Screening

Approved By:

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Status: **APPROVED**

PURPOSE:

To screen for Group B Streptococcus in prenatal patients and provide guidance in the identification of isolated beta-hemolytic Streptococcus spp.

SAMPLE INFORMATION:

Type	Swab <ul style="list-style-type: none"> Amie's with or without charcoal
Source	Collect a combined introital (vaginal and anorectal area) swab. Specimen for GBS screening in pregnancy should be collected at 35 to 37 weeks gestation
Stability	If the sample is received in the laboratory and processed greater than 48 h from collection: <ul style="list-style-type: none"> Add specimen quality comment "Delayed transport may have compromised the recovery of organism"
Storage Requirements	Room temperature
Criteria for rejection and follow up action	<ol style="list-style-type: none"> Unlabeled/mislabeled swab Dry swab

REAGENTS and/or MEDIA:

- LIM Broth and Blood (BAP) agar
- Identification reagents: catalase, Streptex rapid latex test for Group B Strep

SUPPLIES:

- Sterile pipettes and wooden sticks
- Streptococcus latex testing cards
- Glass test tubes
- Biosafety cabinet
- 35° CO₂ incubator

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SPECIAL SAFETY PRECAUTIONS:

All patient specimens are assumed to be potential infectious. Universal precautions must be followed

QUALITY CONTROL:

Refer to MIC60100 Non-Exempt Media Quality Control procedure

PROCEDURE INSTRUCTIONS:

Follow the steps in the table below to process swabs for Group B Streptococcal culture screening:

Step	Action	
Processing Swabs for Group B Streptococcal Culture Screening		
1	Place swab into LIM broth, leaving the swab in the broth medium. Loosely recap.	
2	Incubate broth at 35° in CO ₂ incubator	
3	Subculture the broth after 18-24 h of incubation to BAP. Incubate subculture plate at 35° in CO ₂	
4	Examine BAP subculture plate for large, grey, translucent colonies with a small zone of beta-hemolysis or no zone of hemolysis	
5	Perform catalase test on suspect colonies	
6	IF	THEN
	Catalase: POSITIVE	Work-up complete. No GBS
7	IF	THEN
	Latex Agglutination Test: NEGATIVE	Work-up complete. No GBS
	Latex Agglutination Test: POSITIVE	Culture positive for Group Streptococcus

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INTERPRETATION OF RESULTS:

IF	THEN
No GBS	<ul style="list-style-type: none"> • Report: “No <i>Streptococcus agalactiae</i> (Group B) isolated” • A copy is automatically sent to the STH Obstetrics Unit by the LIS
GBS isolated	<ul style="list-style-type: none"> • Add organism: “<i>Streptococcus agalactiae</i>” • Add quantity: “Isolated” • Use canned culture comment: “Please inform laboratory (669-4162) of known penicillin allergy as soon as possible so that susceptibility testing can be performed.” • A copy is automatically sent to the STH Obstetrics Unit by the LIS

REFERENCES:

Clinical Microbiology Procedures Handbook, 4th edition, ASM Press, 2016

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, ASM Press, Washington, D.C.

REVISION HISTORY:

REVISION	DATE	Description of Change	REQUESTED BY
1.0	23-Dec-16	Initial Release	L. Steven
2.0	28 Apr 2017	Renumbered Document; Updated Logo	JGD Bernier

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