I. Introduction

Although any organism may cause infection of the placenta, the most common organisms associated with this syndrome include *S. aureus*, beta hemolytic streptococci *Listeria monocytogenes* and *E. coli*.

II. Specimen Collection and Transport

Swabs should be collected aseptically and transported in Amies transport medium. Tissues should be placed in a clean, sterile container.

III. Reagents and Media

Refer to Appendix I.

IV. Procedure

A. Processing of Specimens:

   a) Preparation of specimen for culture (Refer to Planting Manual).

      1. If tissue is received, aseptically macerate the tissue with the use of a tissue grinder or stomacher.
      2. Prepare 2 smears: one for Gram stain and one to be held in reserve. If STAT TB is requested and approved by the Microbiologist, prepare a slide for AFB stain. Forward a portion of the specimen to Public Health Laboratory (PHL) for processing.
      3. If TB culture is requested, send half of the specimen to PHL.

   b) Direct Examination: Gram stain.
c) Culture:

<table>
<thead>
<tr>
<th>Media</th>
<th>Incubation</th>
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</thead>
<tbody>
<tr>
<td>Blood Agar (BA)</td>
<td>CO₂, 35°C x 48 hours</td>
</tr>
<tr>
<td>Colistin Nalidixic Acid Agar (CNA)</td>
<td>O₂, 35°C x 48 hours</td>
</tr>
<tr>
<td>Chocolate Agar (CHOC)</td>
<td>CO₂, 35°C x 48 hours</td>
</tr>
<tr>
<td>Martin-Lewis Agar (ML)</td>
<td>CO₂, 35°C x 72 hours</td>
</tr>
<tr>
<td>MacConkey Agar (MAC)</td>
<td>O₂, 35°C x 48 hours</td>
</tr>
</tbody>
</table>

B. Interpretation of cultures:

a) Examine the BA, CHOC, CNA and MAC plates after 24 and 48 hours incubation and the ML plate after 48 and 72 hours incubation.
b) All potential pathogens should be identified.
c) For GC work up, refer to Appendix VII.

C. Susceptibility testing:

Refer to Susceptibility Testing Manual.

V. Reporting Results

Gram stain: Report with quantitation presence of pus cells and organisms.

Culture:

Negative Report: “No significant growth” or “No growth”.
“Neisseria gonorrhoeae isolated.”

If ML plate is overgrown by swarming Proteus or yeast, report ONLY as “Unable to rule out Neisseria gonorrhoeae due to bacterial/yeast overgrowth”.

Positive Report: “Neisseria gonorrhoeae isolated”, (do not quantify), beta lactamase negative or positive”. (enter the beta lactamase
result under “Breakpoint Panel” in LIS Isolate Screen).
Quantitate and report all other significant isolates with appropriate sensitivity results.

Telephone all positive GC cultures to floor/ordering Physician.

For CHC in-patients, inform CHC infection control of all GC isolates.

For all positive GC cultures, a Communicable Disease Report is sent to the Medical Officer of Health by the microbiologist or supervisor.

VI. References
