Provisional Recommendations for the Prevention of Perinatal Group B Streptococcal Disease

Date of posting of provisional recommendations: July 29, 2010 Tentative date of publication of 2010 Guidelines in *CDC Morbidity and Mortality Weekly Report*: November 2010

Procedure for collecting clinical specimens for culture of group B streptococcus at 35-37 weeks' gestation

Excerpt Below.

Procedure for processing clinical specimens for culture of group B Streptococcus (Figure 3)
• Remove swab(s) from transport medium.* Inoculate swab(s) into a recommended selective broth medium, such as Todd-Hewitt broth supplemented with either gentamicin (8 µg/ml) and nalidixic acid (15 µg/ml) [TransVag broth], or with colistin (10 µg/ml) and nalidixic acid (15 µg/ml) [LIM broth]. TransVag broth may be supplemented with 5% defibrinated sheep blood to increase the recovery of GBS. Alternatively, swabs can be inoculated into selective enrichment broth that incorporates chromogenic pigments for the detection of beta-hemolytic GBS using color detection. Examples of appropriate commercially available options include StrepB carrot broth™ or Granada™ Biphasic broth. • Incubate inoculated selective broth for 18-24 hours at 35 -37 C in ambient air or 5% CO2. • For TransVag or LIM broth, subculture the incubated broth to an appropriate agar plate (e.g., tryptic soy agar with 5% defibrinated sheep blood, Colombia agar with colistin and nalidixic acid, or a commercial chromogenic agar). For chromogenic broth, monitor for color change indicative of GBS as per product instructions. GBS detection using chromogenic broth is only possible for beta-hemolytic strains, and therefore all broths that are negative (i.e. no color detection) should be subcultured to a sheep blood agar plate with 5% sheep blood or tested for GBS antigen or by DNA probe to further identify non-hemolytic GBS strains. • Inspect agar plates and identify organisms suggestive of GBS (i.e., narrow zone of beta hemolysis on blood agar, gram-positive cocci, catalase negative). Note that hemolysis can be difficult to observe, so typical colonies without hemolysis should also be further tested. If GBS is not identified after incubation for 18-24 hours, then reincubate plates overnight and examine for suspected GBS colonies. • Various streptococcal grouping latex agglutination tests or other tests for GBS detection (e.g., GBS Accuprobe®) may be used for specific identification, or the CAMP test can be employed for presumptive identification. • Optional direct broth testing**: Detection of GBS can be determined directly from broth media using latex agglutination, probes or nucleic acid amplification tests (NAAT) such as PCR.

To download the full document go to the CDC website.
http://www.cdc.gov/groupbstrep/guidelines/downloads/provisional-recommendations-508.pdf