 <p style="text-align: center;">CREDIT VALLEY THE CREDIT VALLEY HOSPITAL</p>	CLINICAL PRACTICE GUIDELINE	PROFESSIONAL PRACTICE
TITLE: Prevention of Perinatal Group B Streptococcal Disease		
DATE OF ISSUE: 2004, 05	PAGE 1 OF 5	NUMBER: CPG 16-3
SUPERCEDES: 2000, 03 1999, 11	ISSUED BY: _____ TITLE: Chief of Medical Staff	
	ISSUED BY: _____ TITLE: President	

Purpose:

To provide a guideline for the prevention of early onset Group B Streptococcal (GBS) infection in the newborn.

Definitions:

Despite great progress in perinatal GBS disease prevention in the 1990's GBS remains a major cause of bacterial sepsis and morbidity and mortality among newborn infants. The source of infection in the neonate is the colonized maternal birth canal and transmission occurs before or during the birth process.

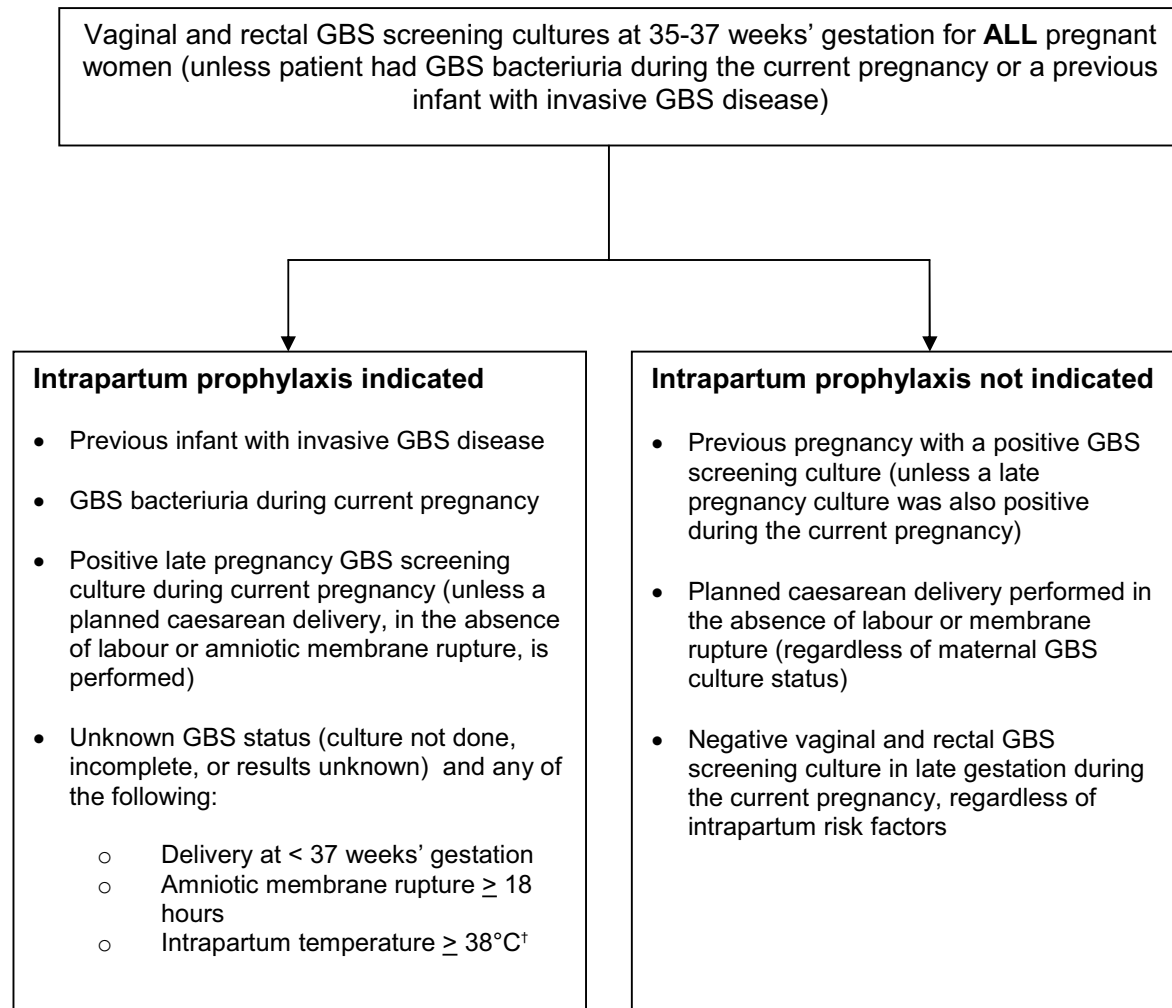
Selection Criteria:

This clinical practice guideline reflects the 2002 Centre for Disease Control (CDC) recommendation that universal prenatal screening for vaginal and rectal GBS colonization be done between 35 and 37 weeks gestation.

Indications for Intrapartum Antibiotic Prophylaxis:

Indications for intrapartum antibiotic prophylaxis to prevent GBS disease under a universal prenatal screening strategy based on combined vaginal and rectal cultures collected at 35-37 weeks' gestation from all pregnant women are shown in Figure 1.

Figure 1. Indications for intrapartum antibiotic prophylaxis to prevent GBS disease under a universal prenatal screening strategy based on combined vaginal and rectal cultures collected at 35-37 weeks' gestation from all pregnant women



[†] If amnionitis is suspected, broad spectrum antibiotic therapy that includes an agent known to be active against GBS should replace GBS prophylaxis.

Recommended Regimens for Antimicrobial Prophylaxis:

Intrapartum

Optimal use of chemoprophylaxis requires a sufficient interval (greater than or equal to 4 hours) between beginning antibiotics and delivery. The recommended regimens for intrapartum antimicrobial prophylaxis for perinatal GBS disease prevention is shown in Figure 2.

Figure 2. Recommended Regimens for Intrapartum Antimicrobial Prophylaxis for Perinatal Group B Streptococcus Disease Prevention*

Recommended	Penicillin G, 5 million units IV initial dose, then 2.5 million units IV every 4 hours until delivery
Alternative	Ampicillin, 2 g IV initial dose, then 1 g IV every 4 hours until delivery
If penicillin allergic[†]	
<ul style="list-style-type: none"> • Patients not at high risk for anaphylaxis 	Cefazolin, 2 g IV initial dose, then 1 g IV every 8 hours until delivery
<ul style="list-style-type: none"> • Patients at high risk for anaphylaxis GBS susceptible to clindamycin and erythromycin 	Clindamycin, 900 mg IV every 8 hours until delivery OR Erythromycin, 500 mg IV every 6 hours until delivery
<ul style="list-style-type: none"> • GBS resistant to clindamycin or erythromycin or susceptibility unknown 	Vancomycin, 1 g IV every 12 hours until delivery

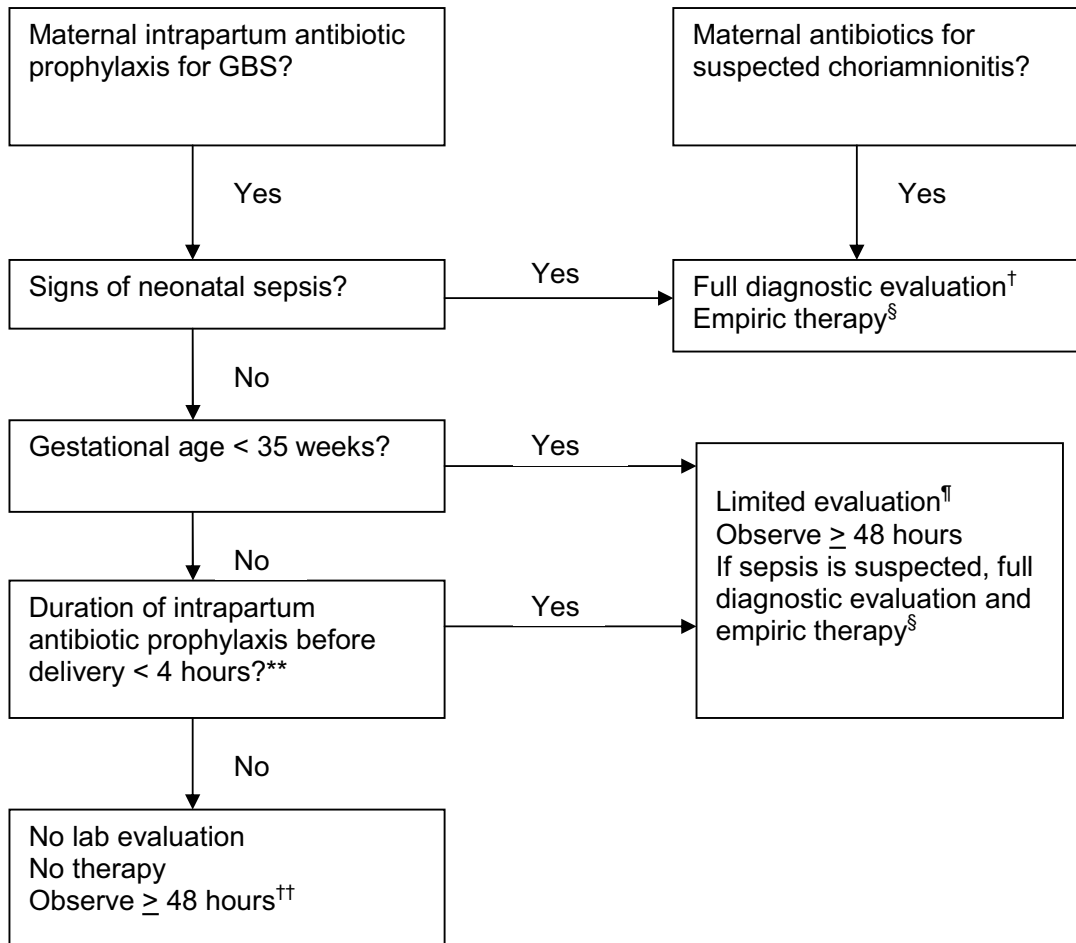
* Broader spectrum agents, including an agent active against GBS, may be necessary for treatment of chorioamnionitis

[†] History of penicillin allergy should be assessed to determine whether a high risk for anaphylaxis is present. Penicillin-allergic patients at high risk for anaphylaxis are those who have experienced immediate hypersensitivity to penicillin including a history of penicillin related anaphylaxis; other high risk patients are those with asthma or other diseases that would make anaphylaxis more dangerous or difficult to treat, such as persons being treated with beta-adrenergic-blocking agents.

Neonatal

The neonate should be managed according to the algorithm in Figure 3 Management of the newborn whose mother received intrapartum antimicrobial agents.

Figure 3. Algorithm for Management of a Newborn Whose Mother Received Intrapartum Antimicrobial Agents for the Prevention of Early-onset- Group B Streptococcal Disease or Suspected Chorioamnionitis.



* If no maternal intrapartum prophylaxis for GBS was administered despite an indication being present, data are insufficient on which to recommend a single management strategy.

† Includes complete blood cell count and differential, blood culture and chest radiograph if respiratory abnormalities are present. When signs of sepsis are present, a lumbar puncture, if feasible, should be performed.

§ Duration of therapy varies depending on results of blood culture, cerebrospinal fluid findings, if obtained, and the clinical course of the infant. If laboratory results and clinical course do not indicate bacterial infection, duration may be as short as 48 hours.

¶ CBC with differential and blood culture.

*** Applies only to penicillin, ampicillin, or cefazolin and assumes recommended dosing regimens.

†† A healthy appearing infant who was > 38 weeks gestation at delivery and whose mother received > 4 hours of intrapartum prophylaxis before delivery may be discharged home after 24 hours if other discharge criteria have been met and a person able to comply fully with instructions for home observation will be present. If any one of these conditions is not met, the infant should be observed in the hospital for at least 48 hours and until criteria for discharge are achieved.

Evaluation:

A random audit will be done after the guideline has been in place for 12 months to determine compliance and outcomes in the prevention of early-onset Group B Streptococcal infections in the newborn.

Approval:

Department of Obstetrics and Gynecology: January 2004

Department of Pediatrics: February 2004

Perinatal Steering Committee: March 2004

Pharmacy and Therapeutics: March 2004

Clinical Quality Care Committee: March 2004

Professional Practice Committee: April 2004

Medical Advisory Committee: May 2004

References:

American Academy of Pediatrics. Revised Guidelines for Prevention of Early-onset Group B Streptococcal (GBS) Infection March 1997.

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Whitney C, Plikaytis B, Gozansky W, Wenger J, Schuchat A: Prevention Practices for the Perinatal Group B Streptococcal Disease: A Multi-State Surveillance Analysis. Obstetrics and Gynecology Vol. 89, No. 1, January 1997.