



# POSITION STATEMENT

## Prevention of Group B Streptococcal Disease in the Newborn

Universal screening for group B streptococcus (GBS) at 36 0/7 to 37 6/7 weeks gestation and antibiotic prophylaxis (IAP) in labor have significantly decreased the rate of early-onset GBS disease among newborns.<sup>1,2</sup> Based on recent guidelines for the prevention of early-onset GBS infection in newborns,<sup>1</sup> the American College of Nurse-Midwives (ACNM) recommends the following:

- Midwives and other maternity care providers should be knowledgeable about the prevention of GBS disease in newborns and recommended care practices based on the most recent clinical guidelines.<sup>1</sup>
- Through a process of shared decision-making, midwives should provide unbiased information based on current evidence to help families make informed choices regarding screening and IAP.
- Penicillin or ampicillin is the drug of choice for women who are not allergic to penicillin; clinical guidelines for alternative antibiotic regimens should be followed closely to improve efficacy and decrease the risk of antibiotic resistance.
- Evidence does not clearly demonstrate that obstetric interventions such as intrauterine monitoring, mechanical cervical ripening, and membrane sweeping affect rates of GBS disease in newborns.<sup>1</sup> Use of these interventions should be based on accepted guidelines for practice and not should not be affected by the presence of a positive GBS culture.
- Indicated obstetric procedures should not be delayed so a woman can receive the recommended 4 hours of IAP.
- In women with unknown GBS status and history of GBS colonization in a previous pregnancy, providers may offer IAP as part of a shared decision-making process rather than basing the decision to initiate antibiotics on intrapartum risk factors or results of rapid testing.

### Background

In the 1970s, GBS was the leading infectious cause of early neonatal morbidity and mortality in the United States, and case fatality ratios were as high as 50%.<sup>2</sup> In the 1990s, recommendations for IAP to prevent perinatal GBS disease were issued by various organizations. As a result, the incidence of GBS declined dramatically from 1.7 cases per 1,000 live births in the early 1990s to 0.34 to 0.37 cases per 1,000 live births in 2002.<sup>2</sup> In 2015 the incidence rate was 0.23 newborns per 1,000 live births.<sup>1</sup> However, despite these successes, early-onset GBS disease remains the leading cause of newborn infection in the United States.<sup>1</sup>

While there is concern that universal screening and IAP may lead to increased antibiotic

resistance among GBS strains, GBS remains susceptible to penicillin and ampicillin. However, resistance to clindamycin and erythromycin is increasing, so susceptibility testing with GBS cultures is of paramount importance.<sup>3</sup> Concern also exists that the widespread implementation of IAP recommendations may lead to increased incidence of neonatal sepsis caused by ampicillin-resistant, non-GBS organisms such as *E. coli*. Increases in late-onset Gram-negative and candida infections have been observed in preterm or very low birthweight infants<sup>3</sup>

ACNM recognizes that despite current recommendations, families may choose not to accept GBS screening or treatment in labor for a positive GBS culture. Women may be aware that universal screening for GBS is not recommended in all industrialized countries,<sup>4</sup> or they may have concerns regarding emerging evidence on the effect of antibiotic treatment for GBS during labor on infant gut microbiota.<sup>5-7</sup> Midwives can provide evidence and non-biased recommendations to support families during a process of shared decision-making.

Certified midwives and certified nurse-midwives should lead and/or participate in research on issues related to the prevention of GBS disease to improve health outcomes for women and infants. ACNM recommends further research related to the prevention of GBS disease on following topics:

- The association between intrapartum interventions, including internal monitoring, digital vaginal examinations after rupture of membranes, mechanical cervical ripening, and sweeping of the membranes, and subsequent, early-onset GBS disease.
- The reliability of GBS cultures and rapid testing collected by patients.
- The racial, ethnic, and socio-economic disparities in rates of GBS disease.
- Interventions to target late-onset GBS disease in the newborn, possibly including the development of a GBS vaccine for adults or adolescents.
- Long-term outcomes for infants exposed to the antibiotics currently recommended for IAP.

## REFERENCES

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*Note.* Midwifery as used throughout this document refers to the education and practice of certified nurse-midwives (CNMs) and certified midwives (CMs) who have been certified by the American Midwifery Certification Board (AMCB).

Source: Division of Standards and Practice, Clinical Standards and Documents Section  
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