



POSITION STATEMENT

Prevention of Group B Streptococcal Disease in the Newborn

The American College of Nurse-Midwives (ACNM) endorses the 2010 guidelines of the Centers for Disease Control and Prevention (CDC) for the prevention of group B streptococcal (GBS) disease in the newborn¹ and affirms the following:

- Universal GBS screening at 35-37 weeks gestation and antibiotic prophylaxis in labor have significantly decreased the rate of early-onset of GBS disease among newborns.¹
- Midwives and other maternity care providers have a responsibility to be knowledgeable about prevention of GBS disease in the newborn and recommend care practices based on the current CDC guidelines.
- Through a process of shared decision making, midwives should provide unbiased information based on current evidence to help families make informed choices.
- 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.
- Obstetric interventions such as intrauterine monitoring, mechanical cervical ripening, and membrane sweeping have not been clearly demonstrated to affect rates of GBS disease in the newborn.¹ 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 intrapartum antibiotic prophylaxis (IAP).

Background

In the 1970s, before the use of IAP, GBS disease had an incidence rate of 1.7 per 1000 live births and a case fatality ratio of 50%.¹ The incidence of GBS disease declined dramatically as a result of increased screening and the use of IAP, and the incidence declined even further as recommendations for IAP were refined.¹ In the late 2000s the case fatality ratio was 4%-6% and the incidence rate was 0.22 per 1000 live births. However, despite these successes, early-onset GBS disease remains the leading infectious cause of neonatal morbidity and mortality in the United States.¹

In 1996, the CDC released GBS disease prevention guidelines and recommended that IAP be based on risk factors for GBS disease in the newborn or on antepartum culture results. These guidelines were revised in 2002, when the CDC recommended universal culture screening for all women at 35-37 weeks gestation and IAP for women with positive cultures or unknown status with risk factors. Additional indications for IAP include GBS bacteruria during pregnancy, GBS disease in previous newborn, and preterm labor or PPROM (pending culture results).

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.² Another concern has been raised that the widespread implementation of IAP recommendations may lead to an increase in neonatal sepsis caused by ampicillin-resistant, non-GBS organisms such as *E. coli*. Such an increase has been observed in very low birthweight infants only, and trends are monitored on an ongoing basis via CDC surveillance system.²

ACNM recognizes that despite current CDC 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 countries³ or have concerns regarding emerging evidence that antibiotic treatment for GBS during labor may change the infant gut microbiota.⁴⁻⁶ Midwives can provide evidence and non-biased recommendations and support families using a process of shared decision making.

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

- The association between intrapartum interventions such as internal monitoring, number of digital vaginal examinations after rupture of membranes, mechanical cervical ripening, and sweeping of the membranes and subsequent early-onset GBS disease.
- The reliability of patient-collected GBS cultures and rapid testing.
- The racial, ethnic, and socio-economic disparities in rates of GBS disease.
- Interventions targeting 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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