No. 276, May 2012 (Reaffirmed February 2018)

# No. 276-Management of Group B Streptococcal Bacteriuria in Pregnancy

This clinical practice guideline has been prepared by the Infectious Diseases Committee, reviewed by the Family Practice Advisory Committee, and approved by the Executive and Council of The Society of Obstetricians and Gynaecologists of Canada. A revision is underway.

Victoria M. Allen, MD, Halifax, NS

Mark H. Yudin, MD, Toronto, ON

Infectious Diseases Committee: Mark H. Yudin, MD (Chair), Toronto, ON; Victoria M. Allen, MD, Halifax, NS; Céline Bouchard, MD, Québec City, QC; Marc Boucher, MD, Montréal, QC; Sheila Caddy, MD, Edmonton, AB; Eliana Castillo, MD, Calgary, AB; Deborah M. Money, MD, Vancouver, BC; Kellie E. Murphy, MD, Toronto, ON; Gina Ogilvie, MD, Vancouver, BC; Caroline Paquet, RM, Trois-Rivières, QC; Julie van Schalkwyk, MD, Vancouver, BC; Vyta Senikas, MD, Ottawa, ON. Disclosure statements have been received from all members of the committee.

**Key Words:** Group B streptococcal bacteriuria, neonatal group B streptococcal disease

## Abstract

**Objective:** To provide information regarding the management of group B streptococcal (GBS) bacteriuria to midwives, nurses, and physicians who are providing obstetrical care.

**Outcomes:** The outcomes considered were neonatal GBS disease, preterm birth, pyelonephritis, chorioamnionitis, and recurrence of GBS colonization.

**Evidence:** Medline, PubMed, and the Cochrane database were searched for articles published in English to December 2010 on the topic of GBS bacteriuria in pregnancy. Bacteriuria is defined in this clinical practice guideline as the presence of bacteria in urine, regardless of the number of colony-forming units per mL (CFU/mL). Low colony counts refer to <100 000 CFU/mL, and high (significant) colony counts refer to ≥100 000 CFU/mL. Results were restricted to systematic reviews, randomized controlled trials, and relevant observational studies. Searches were updated on a regular basis and incorporated in the guideline to February 2011. Grey (unpublished) literature was identified through searching the websites of health technology assessment and health technology assessment-related agencies, clinical practice guideline collections, clinical trial registries, and national and international medical specialty societies.

**Values:** Recommendations were quantified using the evaluation of evidence guidelines developed by the Canadian Task Force on Preventive Health Care (Table).

**Benefits, Harms, and Costs:** The recommendations in this guideline are designed to help clinicians identify pregnancies in which it is appropriate to treat GBS bacteriuria to optimize maternal and perinatal outcomes, to reduce the occurrences of antibiotic anaphylaxis, and to prevent increases in antibiotic resistance to GBS and non-GBS pathogens. No cost-benefit analysis is provided.

**Recommendations:**

1. Treatment of any bacteriuria with colony counts ≥100 000 CFU/mL in pregnancy is an accepted and recommended strategy and includes treatment with appropriate antibiotics (II-2A).
2. Women with documented group B streptococcal bacteriuria (regardless of level of colony-forming units per mL) in the current pregnancy should be treated at the time of labour or rupture of membranes with appropriate intravenous antibiotics for the prevention of early-onset neonatal group B streptococcal disease (II-2A).

J Obstet Gynaecol Can 2018;40(2):e181–e186

https://doi.org/10.1016/j.jogc.2017.11.025

**Table. Key to evidence statements and grading of recommendations, using the ranking of the Canadian Task Force on Preventive Health Care**

| Quality of evidence assessment[a] | Classification of recommendations[b] |
|---|---|
| I: Evidence obtained from at least one properly randomized controlled trial | A. There is good evidence to recommend the clinical preventive action |
| II-1: Evidence from well-designed controlled trials without randomization | B. There is fair evidence to recommend the clinical preventive action |
| II-2: Evidence from well–designed cohort (prospective or retrospective) or case–control studies, preferably from more than one centre or research group | C. The existing evidence is conflicting and does not allow to make a recommendation for or against use of the clinical preventive action; however, other factors may influence decision-making |
| II-3: Evidence obtained from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of treatment with penicillin in the 1940s) could also be included in this category | D. There is fair evidence to recommend against the clinical preventive action |
| III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees | E. There is good evidence to recommend against the clinical preventive action |
| | L. There is insufficient evidence (in quantity or quality) to make a recommendation; however, other factors may influence decision-making |

[a]The quality of evidence reported in these guidelines has been adapted from The Evaluation of Evidence criteria described in the Canadian Task Force on Preventive Health Care.

[b]Recommendations included in these guidelines have been adapted from the Classification of Recommendations criteria described in The Canadian Task Force on Preventive Health Care.

Taken from: Woolf SH, et al. Canadian Task Force on Preventive Health Care. New grades for recommendations from the Canadian Task Force on Preventive Health Care. CMAJ 2003;169:207–8.

3. Asymptomatic women with urinary group B streptococcal colony counts <100 000 CFU/mL in pregnancy should not be treated with antibiotics for the prevention of adverse maternal and perinatal outcomes such as pyelonephritis, chorioamnionitis, or preterm birth (II-2E).
4. Women with documented group B streptococcal bacteriuria should not be re-screened by genital tract culture or urinary culture in the third trimester, as they are presumed to be group B streptococcal colonized (II-2D).