



Recommendations on Screening for asymptomatic bacteriuria in pregnancy – Clinician Summary

POPULATION

This screening recommendation applies to pregnant women who are not experiencing symptoms of a UTI and are not at increased risk for ASB

BURDEN OF ILLNESS

Prevalence of asymptomatic bacteriuria (ASB) is estimated to be 2-10% in premenopausal ambulatory women. There is considerable variation in the reported risk of pyelonephritis associated with untreated ASB in pregnant women. Women with diabetes, recurrent urinary tract infections, polycystic kidneys, other congenital renal anomalies and sickle cell disease are at increased risk for ASB and associated complications in pregnancy. Pyelonephritis has been associated with maternal septicemia, renal dysfunction, and anemia as well as fetal outcomes such as low birth weight; however the relationship between ASB and pregnancy complications is uncertain.

RECOMMENDATIONS

We recommend screening pregnant women once during the first trimester with urine culture for asymptomatic bacteriuria (weak recommendation; very low-quality evidence).

This recommendation applies to pregnant women who are not experiencing symptoms of a UTI and are not at increased risk for asymptomatic bacteriuria.

BASIS OF RECOMMENDATIONS

- Very low quality evidence was found for the benefits and harms of screening for ASB in pregnancy.
- Low quality, indirect evidence was found for effectiveness of treating screen-identified women with ASB to modestly reduce the incidence of pyelonephritis and the number of low birth weight infants.
- In the judgement of the task force, the potential benefits of screening outweigh possible harms, and a weak recommendation in favor of screening is warranted.
- This recommendation places a relatively higher priority on the small but uncertain benefit of screening for ASB and a relatively lower priority on the lack of evidence regarding serious harms associated with antibiotic use for pregnant mothers and their babies.

CONSIDERATIONS FOR IMPLEMENTATION

Screening should occur once in the first trimester with a urine culture or at first prenatal visit if this visit occurs later in pregnancy. The evidence did not support an optimal screening time in pregnancy. For ease of implementation this recommendation advises first trimester screening, recognizing that

not all women will present for prenatal care during the first trimester, and that screening may occur after the first trimester.

Women with diabetes, recurrent urinary tract infections, polycystic kidneys, other congenital renal anomalies and sickle cell disease would follow guidance for high risk groups. A history of recurrent urinary tract infection is defined as two uncomplicated UTIs in the past 6 months or 3 positive cultures in the past 12 months. When urine cultures are not available clinicians should be aware that alternative tests (urine dipstick) have sufficient specificity for ASB (e.g., 99%) but poor sensitivity (e.g., 55%), and thus fail to detect a substantial number of cases . There was no evidence to support screening with a single urine culture compared to 2 or more urine cultures.