

ASYMPTOMATIC BACTERIURIA IN PREGNANCY V3.0

Comments from the Expert Advisory Group

- Asymptomatic bacteriuria is the presence of one or more species of bacteria growing in the urine at a quantitative count of $>10^5$ colony-forming units (CFU) /mL, without signs or symptoms attributable to urinary tract infection.
- Asymptomatic bacteriuria occurs in 2% to 7% of pregnant patients.
- Antibiotic treatment of asymptomatic bacteriuria reduces the risk of pyelonephritis, low birth weight and premature labour.
- Screening for asymptomatic bacteriuria does not need to be carried out in general practice. It may form part of the booking visit assessment, depending on local hospital policy.
- The presence of asymptomatic bacteriuria should be confirmed by two consecutive urine cultures (preferably within two weeks). If there is a growth of group B *Streptococcus* with $>10^5$ CFU/mL this should be treated and a repeat urine is not required. For other organisms, in asymptomatic patients, a second urine culture should be requested to confirm bacteriuria.
- Urine culture remains the gold standard for the detection of asymptomatic bacteriuria.
- Urine dipstick testing is not sufficient to screen for bacterial UTIs in pregnancy.
- A positive urine culture for bacteriuria in the second sample of urine should be treated with an appropriate antibiotic for the bacteria isolated and the trimester of pregnancy.
- Confirm clearance of bacteria with urine culture after treatment.
- Repeat urine cultures at subsequent antenatal visits may be required for prior recurrent UTIs, diabetes mellitus, renal anomaly.
- Trimethoprim should not be prescribed for pregnant patients with established folate deficiency, low dietary folate intake, or patients taking other folate antagonists.
- Nitrofurantoin should be avoided after 36+0 weeks due to risk of neonatal haemolysis.
- In later pregnancy urine samples should not be sent for culture in asymptomatic patients based on detection of leucocytes on dipstick when testing for glucose / protein. However, culture should be considered when nitrites are found. It is worth noting that this late stage screening is usually carried out in the hospital antenatal clinic. Only in exceptional circumstances where the patient lives far away from the hospital antenatal clinic may they request testing be performed by their GP.

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Treatment

| ASYMPTOMATIC BACTERIURIA IN PREGNANCY ANTIBIOTIC TREATMENT TABLE | | | |
|---|-----------------------|----------|---|
| Antibiotic choice should be based on urine culture and susceptibility | | | |
| Drug | Dose | Duration | Notes |
| Nitrofurantoin Immediate Release Capsules OR | 50 mg every 6 hours | 7 days | Avoid after 36+0 weeks due to risk of neonatal haemolysis. Immediate/ Prolonged Release should be stated on the prescription (¹ see note below on formulation difference) |
| Nitrofurantoin Prolonged Release Capsules OR | 100 mg every 12 hours | 7 days | |
| Amoxicillin* OR | 500 mg every 8 hours | 7 days | Amoxicillin therapy should only be used if the MSU result confirms the pathogen to be amoxicillin / ampicillin susceptible. It is not suitable as empirical treatment for UTI. Avoid in penicillin allergy |
| Cefalexin* | 500 mg every 8 hours | 7 days | Cephalosporins should not be used in severe penicillin allergy |

If further information required on treatment options, please seek specialist/ microbiological advice.

* Seek specialist/ microbiological advice in case of severe penicillin allergy in pregnant patients if nitrofurantoin is not an option.

¹ Two nitrofurantoin formulations are available: nitrofurantoin immediate release capsules (MacroDantin[®]) and nitrofurantoin prolonged release capsules (MacroBid[®]). For the treatment of infection the prolonged release capsules are dosed twice daily whilst the standard capsules are dosed four times daily. These products are not interchangeable.

Patient Information

- [Visit HSE A-Z page on website for further information on urinary tract infections in pregnancy](#)
- [Bumps – Best use of medicines in pregnancy](#) (from UK Teratology Information Service)