

URINARY TRACT INFECTIONS**UTI in pregnancy****(Not if pyelonephritis is queried. See advice below)**

- **Asymptomatic bacteriuria in pregnancy:** isolation of the same organism in a properly collected MSU sample on **two separate occasions**, with a colony count of >10,000 - 100,000 organisms/ml.
 - It should be treated in pregnancy because of the higher risk of pyelonephritis and an association with pre-term labour and low birth weight.
 - Treat for 7 days with an antibiotic according to the culture and sensitivity results—treatment options as below.
- **Symptomatic cystitis: send a pre-treatment MSU.** Review any previous microbiology results as a guide. Start empiric treatment as below and adjust when the sensitivities of a pre-treatment MSU are available.
- **Upper UTI/pyelonephritis.** If symptoms suggest pyelonephritis, *the antibiotics below are not suitable, and the patient should be referred for assessment as they often require IV antibiotics.*
- Short-term use of nitrofurantoin in pregnancy is unlikely to cause problems to the foetus; however, it should be avoided at term or if delivery is imminent.
- Quinolones should not be used in pregnancy or in women who are trying to become pregnant.
- Cefalexin is safe in pregnancy but is recommended for third line use in UTIs or pyelonephritis if IV antibiotics are not required. This is due to the increased risk of *C. difficile* and recent reports of serious *C. difficile* infection in pregnant women.
- Pivmecillinam is not known to be harmful in pregnancy. Long courses (>7 days) or repeated courses should be avoided as long-term use of pivmecillinam is associated with carnitine deficiency (see [here](#)).
- The use of pivmecillinam during late pregnancy may cause a false positive test for isovaleric acidemia in the newborn as part of neonatal screening.

Drug	Dose	Duration of Treatment
First line: Nitrofurantoin Avoid at term or if delivery is imminent	100mg MR twice daily (50mg four times a day if MR caps unavailable)	All for 7 days
Second line: Pivmecillinam ²	400mg immediately, then 200mg three times daily	
Third line: Cefalexin	500mg three times a day	
If known to be sensitive based on culture and sensitivity results		
Trimethoprim ¹	200mg twice daily	

¹ Avoid trimethoprim in the first trimester or in women who have a low folate status or on folate antagonists, e.g., anti-epileptics or proguanil.

² The intake shortly before delivery may cause a false positive test for isovaleric acidemia in the newborn's neonatal screening.

The [TARGET antibiotics toolkit hub](#) includes leaflets to discuss with patients, [diagnostic tools](#), and other UTI resources.