

# Urinary Tract Infection in Pregnancy and Breastfeeding

**MotherSafe – Royal Hospital for Women**

**June 2022**

*Information in this leaflet is general in nature and should not take the place of advice from your health care provider. With every pregnancy there is a 3 to 5% risk of having a baby with a birth defect. Breast milk provides optimum nutrition for babies and conveys many additional health benefits to mother and baby.*

## **What is a urinary tract infection?**

A urinary tract infection, also called “UTI”, is an infection of the urinary system, which is the group of organs in the body that handle urine.<sup>1</sup> Urinary tract infections can affect either the bladder (more common) or the kidneys.<sup>1,2</sup> Most urinary tract infections are caused by the spread of bacteria from the digestive system (where they usually live and do not cause a problem) into the urinary tract.<sup>1</sup> These bacteria can then multiply and cause the lining of the urinary tract to become red, swollen and irritated.<sup>1</sup>

For most people, a urinary tract infection is a one-off illness that settles quickly and can be treated with antibiotics if necessary.<sup>1</sup> However, for some people, urinary tract infections are a continuing problem.<sup>1</sup> Women who have diabetes and who are overweight are at higher risk of getting recurrent UTIs.<sup>1,2</sup> You are considered to have regular urinary tract infections if you have either two or more urinary tract infections within 6 months; or three or more urinary tract infections within one year.<sup>1</sup>

## **How to prevent urinary tract infections**

Routine hygiene methods may help women to prevent urinary tract infections.<sup>3,4</sup> These methods include drinking plenty of fluids, not ignoring the urge to urinate, washing hands before going to the toilet, wiping from front to back (or front and back separately) after using the bathroom, urinating after sexual activity, taking showers instead of baths and avoiding douching, sprays, or powders in the genital area.<sup>3,4,5</sup>

## **Issues for pregnancy**

Urinary tract infections are common in pregnant women.<sup>3</sup> If a pregnant woman gets a bladder infection, it is more likely to lead to a kidney infection than in a non-pregnant woman.<sup>3</sup> This may be because the tubes between the bladder and kidneys get wider during pregnancy and make it easier for bacteria to travel further up the urinary tract.<sup>3</sup>

## **Why treat?**

If you have bacteria in your urine during pregnancy there is a small risk of unfavourable pregnancy outcomes such as preterm labour (when labour starts before 37 weeks of pregnancy) or having a baby that is underweight.<sup>3</sup> It is important to get treatment if you have bacteria in your urine whilst you are pregnant, even if you do not have symptoms, as you may be at an increased risk of kidney infection<sup>1,3</sup>.

## **What is asymptomatic bacteriuria?**

Asymptomatic bacteriuria is the medical term for when there is more bacteria than normal in a person’s urine but the person does not have symptoms of infection.<sup>3</sup> In pregnant women, doctors usually screen for this by using a simple urine test near the end of the first trimester.<sup>3</sup>

## **What are the symptoms of a urinary tract infection?**

Symptoms of a urinary tract infection depend on which part of the urinary tract is affected.<sup>3</sup> If you have a bladder infection your symptoms may include pain or a burning feeling when you urinate, need to urinate often, need to urinate in a hurry or blood in the urine.<sup>3</sup> If you have a kidney infection you may have the above symptoms plus fever, back pain or nausea and vomiting.<sup>3</sup>

## **Antibiotics are used to treat urinary tract infections during pregnancy**

Urinary tract infections are caused by bacteria and are treated with antibiotics whether or not you are pregnant.<sup>1,2</sup> In pregnant women, asymptomatic bacteriuria is usually treated with antibiotics to reduce the risk of developing a bladder or kidney infection during the pregnancy.<sup>1</sup> For advice on specific antibiotics in pregnancy, contact MotherSafe or discuss with your healthcare provider but in general all the antibiotics that are commonly used to treat UTIs are not considered to be of concern in either pregnancy or breastfeeding.<sup>2</sup>

## **Complementary therapies**

### **Cranberry**

Cranberry juice has been used traditionally to prevent urinary tract infections.<sup>6</sup> Although there is little information regarding safety and effectiveness in pregnancy and breastfeeding, it is likely to be safe when consumed in amounts commonly found in food.<sup>6</sup> However, poorly treated urinary tract infections can have serious consequences so it is important to see your doctor if you have urinary symptoms.<sup>1,2</sup>

### **Urinary alkalisers**

Urinary alkalisers, such as Ural and Citravescent, are often used to reduce the acidity of urine and help relieve the pain and burning sensation caused by urinary tract infections.<sup>7</sup> There is limited data regarding the safety of urinary alkalisers during pregnancy, but they are not anticipated to be harmful.<sup>7</sup> However, there is a lack of evidence that urinary alkalisers are effective in the treatment of urinary tract infections so it is important to see your doctor as poorly treated urinary tract infections can have serious consequences if not treated with antibiotics.<sup>1,2</sup>

### **Methenamine hippurate (also known as Hexamine hippurate)**

This medicine is a urinary antiseptic that fights bacteria in the urine.<sup>8,9</sup> There is some evidence that methenamine hippurate may be helpful in preventing returning urinary tract infections in some people.<sup>8,9</sup> However, methenamine hippurate is not as effective as antibiotics in managing recurring urinary tract infections so it is important to see your doctor if you have urinary symptoms.<sup>1,2</sup>

### **Breastfeeding when you have a urinary tract infection**

Continue to breastfeed your baby even if you have symptoms of a urinary tract infection.<sup>10</sup> It is important that you drink plenty of fluid, use good hygiene methods and treat symptoms as for pregnancy.<sup>10</sup> Antibiotics are used to treat urinary tract infections.<sup>1,2</sup> Breastfed babies may develop diarrhoea when their mothers are taking antibiotics.<sup>11</sup> For advice on specific antibiotics while breastfeeding, contact MotherSafe or discuss with your healthcare provider.

## **References**

1. NPS Medicinewise: Urinary Tract Infections (UTIs) explained. Available at <https://www.nps.org.au/consumers/urinary-tract-infections-utis#what-is-urinary-tract-infection> Accessed: 28nd June 2022.
2. Urinary Tract Infections (published April 2019. Amended 2021 March). In eTG complete [digital]. Melbourne: Therapeutic Guidelines Limited; Publish 2019 (Amended March 2022). Available at: <https://www.tg.org.au>. Accessed: 22nd July 2021.
3. Department for Health and Wellbeing, Government of South Australia. South Australian Perinatal Practice Guideline. Urinary Tract Infection in Pregnancy. Available at: <https://www.sahealth.sa.gov.au> Accessed: 28 June 2022.
4. Ghouri F, Hollywood A, Ryan K. A systematic review of non-antibiotic measures for the prevention of urinary tract infections in pregnancy. BMC Pregnancy Childbirth. 2018 Apr 13; 18(1):99. doi: 10.1186/s12884-018-1732-2. PMID: 29653573; PMCID: PMC5899369. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5899369/> Accessed: 28 June 2022.
5. Centers for Disease Control. Urinary Tract Infection. Available at: <https://www.cdc.gov/antibiotic-use/uti> Accessed: 28 June 2022.
6. Dante G, Bellei G, Neri I and Facchinetti F. Herbal therapies in pregnancy: what works? Cur Opin Obstet Gynecol 2014;26: 83-91.
7. O'Kane DB, Dave SK, Gore N, Patel F, Hoffmann TC, Trill JL, Del Mar CB. Urinary alkalinisation for symptomatic uncomplicated urinary tract infection in women. Cochrane Database of Systematic Reviews 2016, Issue 4. Art. No.: CD010745. DOI: 10.1002/14651858.CD010745.pub2
8. Lee BS, Bhuta T, Simpson JM, Craig JC. Methenamine hippurate for preventing urinary tract infections. Cochrane Database Syst Rev. 2012 Oct 17; 10(10):CD003265. doi: 10.1002/14651858.CD003265.pub3. PMID: 23076896; PMCID: PMC7144741.
9. Lo TS, Hammer KD, Zegarra M, Cho WC. Methenamine: a forgotten drug for preventing recurrent urinary tract infection in a multidrug resistance era. Expert Rev Anti Infect Ther. 2014 May;12(5):549-54. doi: 10.1586/14787210.2014.904202. Epub 2014 Apr 1. PMID: 24689705.
10. Kellams A. Breastfeeding: Parental education and support. In: UpToDate, Abrams S, Duryea T (Ed), UpToDate, Waltham, MA. Last updated: August 26, 2021. Available at: <https://www.uptodate.com.acs.hcn.com.au/contents/breastfeeding-parental-education-and-support> Accessed: 28 June 2022.
11. The Royal Women's Hospital, Victoria. Medicines in Breastfeeding. June 2018. Available at: <https://www.thewomens.org.au/images/uploads/fact-sheets/Medicines-in-breastfeeding-151018.pdf>. Accessed: 28 June 2022.
11. The Royal Women's Hospital, Victoria. Medicines in Breastfeeding. June 2018. Available at: <https://www.thewomens.org.au/images/uploads/fact-sheets/Medicines-in-breastfeeding-151018.pdf>. Accessed: 28 June 2022.



## *NSW Medications in Pregnancy & Breastfeeding Service*

For more information call MotherSafe: NSW Medications in Pregnancy and Breastfeeding Service on 9382 6539 (Sydney Metropolitan Area) or 1800 647 848 (Non-Metropolitan Area) Monday -Friday 9am-5pm (excluding public holidays)