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FRICION FREE HEALTHCARE



URINARY TRACT INFECTIONS

FACT SHEET

AN INTRODUCTION INTO URINARY TRACT INFECTIONS

Urinary Tract Infections are infections that involve any part of the urinary tract, from the entrance known as the urethra, all the way through to the bladder, the ureters (tubes passing urine from kidneys to bladder), and the kidney's themselves. You probably know it as an uncomfortable feeling down there, suddenly peeing hurts, you're rushing to the toilet only to release a few drops of urine, or noticing that your urine is just off.

There are many risk factors for getting a UTI, including having sex, we will explain this in a little more depth later on.

What causes UTI ?

Urinary tract infections have many causes, and sex is a common risk factor that can contribute to it.

The most common bacteria that can cause UTI's live around the anus, and the physical act i.e. thrusting, of sexual intercourse, can shift bacteria from the back passage toward the urethra, where they can travel up and make themselves home. Females have a shorter urethra (tube passing from the outside of the body to the bladder), which makes it much easier for bacteria to travel up into the bladder and cause an infection.

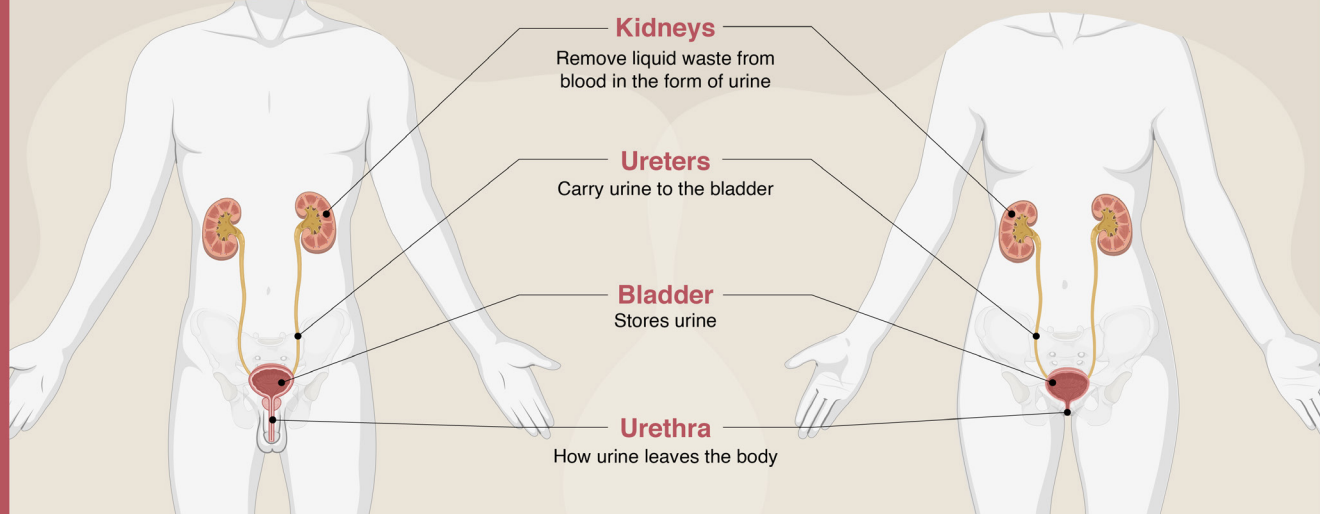
Other risk factors include use of spermicide-coated condoms, diaphragms, and spermicides.

Comorbid conditions, such as diabetes mellitus and structural or functional urinary tract abnormalities, can also increase the risk of cystitis through either feeding the growth of bad (pathogenic) bacteria thriving on elevated sugar levels, or issues with normal flow of urine out of the urethra flushing out pathogenic bacteria.

MALE AND FEMALE URINARY TRACTS

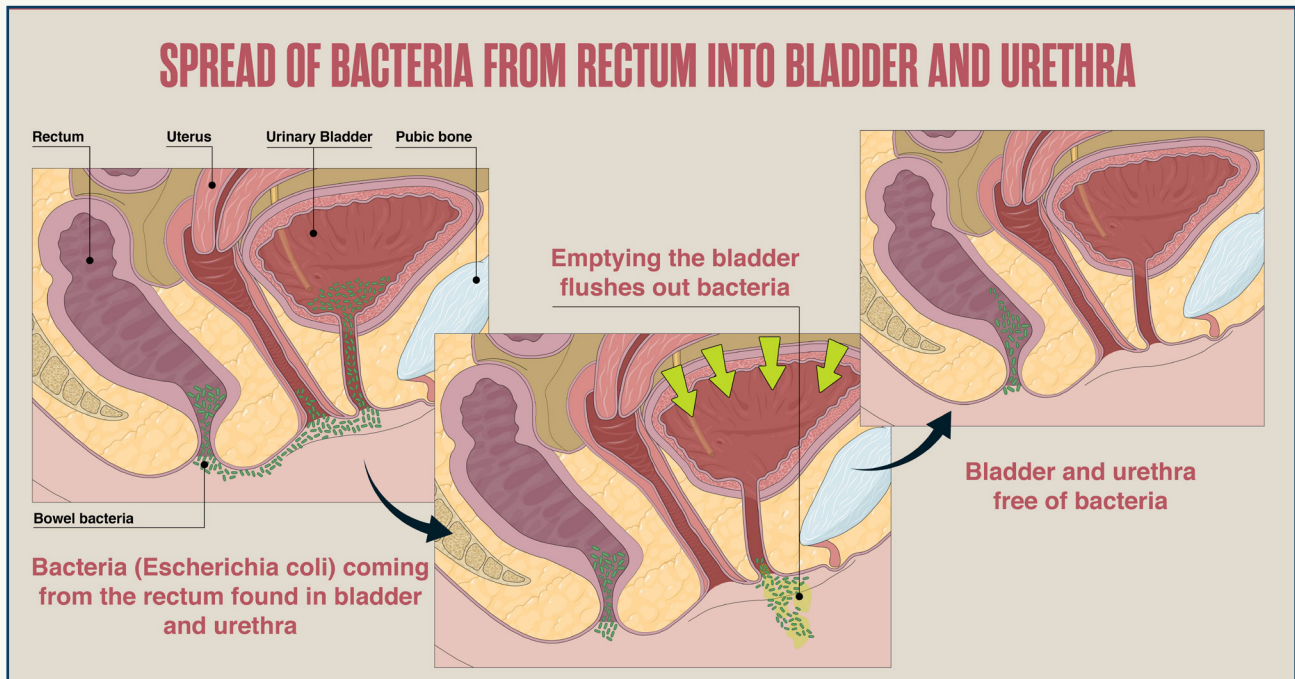
Male Urinary System

Female Urinary System



SYMPTOMS & CAUSES

URINARY TRACT INFECTIONS



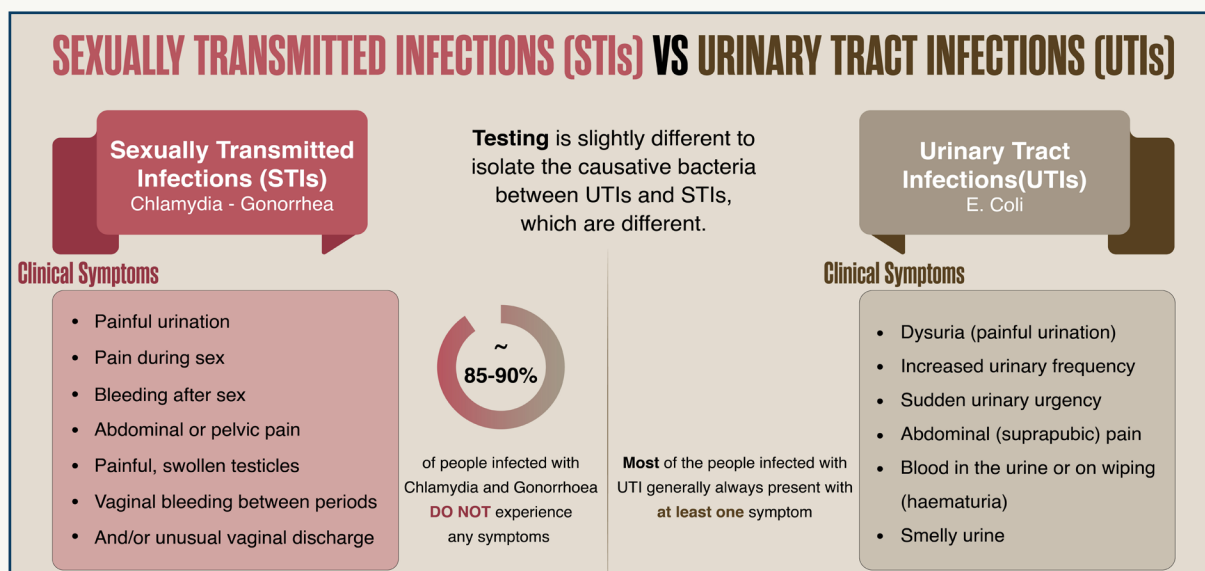
What are the symptoms of a urinary tract infection?

Symptoms commonly include some or all of the following:

- Dysuria (painful urination)
- Increased urinary frequency
- Sudden urinary urgency
- Abdominal (suprapubic) pain
- Blood in the urine or on wiping (haematuria)
- Smelly urine

How do I know if I have a UTI vs an STI?

One of the risk factors for UTI's is sexual intercourse, which is of course a risk for catching STIs. Chlamydia, Gonorrhoea, Mycoplasma and Herpes can all infect the urinary tract and hence, cause pain when passing urine.



RISK FACTORS & MANAGEMENT

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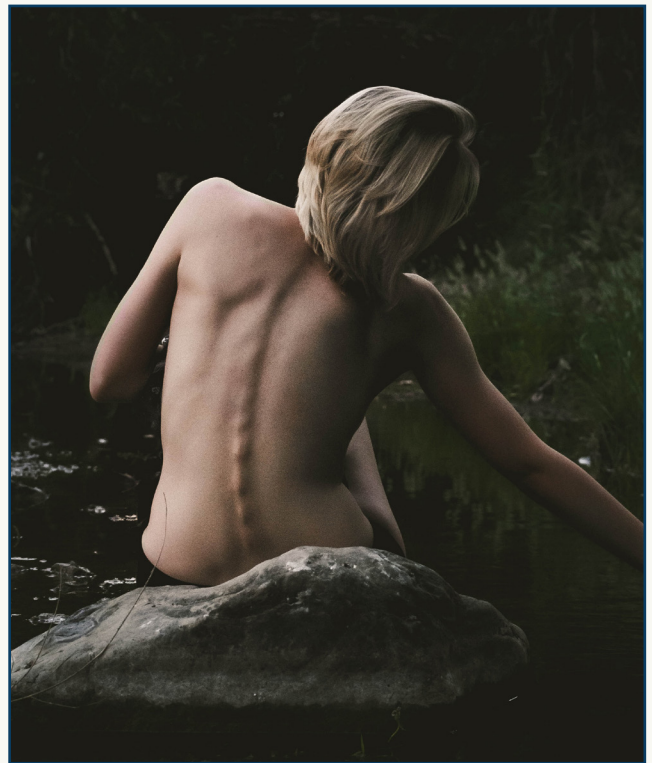
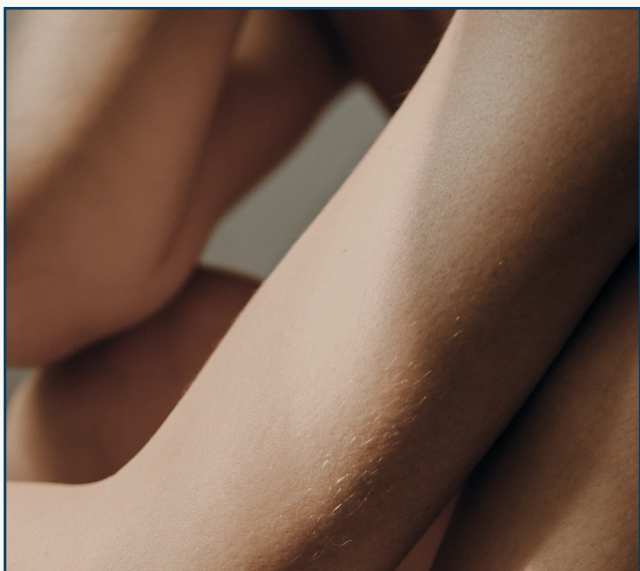
At least 85-90% of people infected with Chlamydia and Gonorrhoea do not experience any symptoms whatsoever [3][4]. This is different for UTI's where most people will experience symptoms, unless older, where symptoms can be less localised and present with things like confusion, and decline in function.

When people with chlamydia and gonorrhoea do experience symptoms, in addition to painful urination they might experience other symptoms, such as genital discharge, bleeding, pelvic pain, and painful, swollen testes.

Whilst there is a lot of crossover between UTI's and STI's, there are some symptoms that do not occur in a standard UTI. Testing is also slightly different to isolate the causative bacteria between the two, which are different.

What are the Different Types of UTI?

There are different types of UTI's, based on which part of the urinary tract is infected. This includes bladder infections (cystitis), kidney infections (pyelonephritis) and urethral infections (urethritis). This factsheet covers uncomplicated cystitis or bladder infections.



Why do UTI's occur more frequently in people with vulvas?

According to a 2013 review [5], UTI's will likely affect at least 50 to 60 percent of women in their lifetime.

This is due to:

- 1** - shorter urethral length ((fancy speak for tube running from the outside in to the bladder)
- 2** - the external urethral meatus (hole urine comes out of) in female bodies is mostly mucosa, or 'moist' tissue, like that which is lining the inside of the vagina. This entrance skin is thinner and more sensitive than in male bodies, with irritation predisposing to damage and a potential home for bacteria to make their way up the urethra
- 3** - the female urethra is located closer to the anus, which carries waste and bacteria such as E. coli out of the body, with E.Coli the number 1 culprit bacteria for UTI's overall.
- 4** - hormonal changes, specifically pre menstrually and in the menopause, can change the microbiome and immune defenses, as

DIAGNOSIS

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well as integrity of the vaginal mucosa of the area (think drier, and thinner), allowing culprit bacteria to replicate and cause infection more easily

UTI's in proportion of males however, (specifically cystitis or infection of the bladder) occurs in a very small proportion of males between 15 and 50 years of age, with an incidence is approximately five to eight urinary tract infections (UTI's) per year per 10,000 young to middle-aged males [6,7]. This is due to:

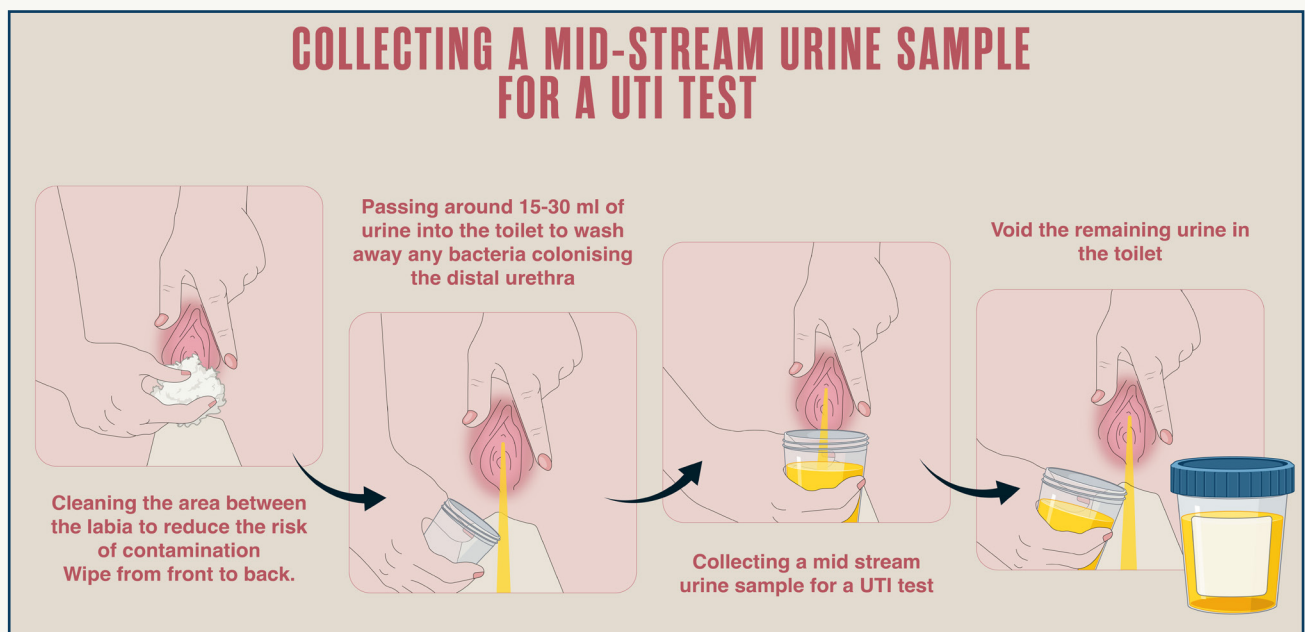
- 1 - longer urethral length
- 2 - a drier periurethral environment (with less frequent colonisation around the urethra)
- 3 - antibacterial properties of prostatic fluid.

How are UTI's diagnosed?

UTI's are diagnosed with history and a mid stream urine sample to isolate causative bacteria.

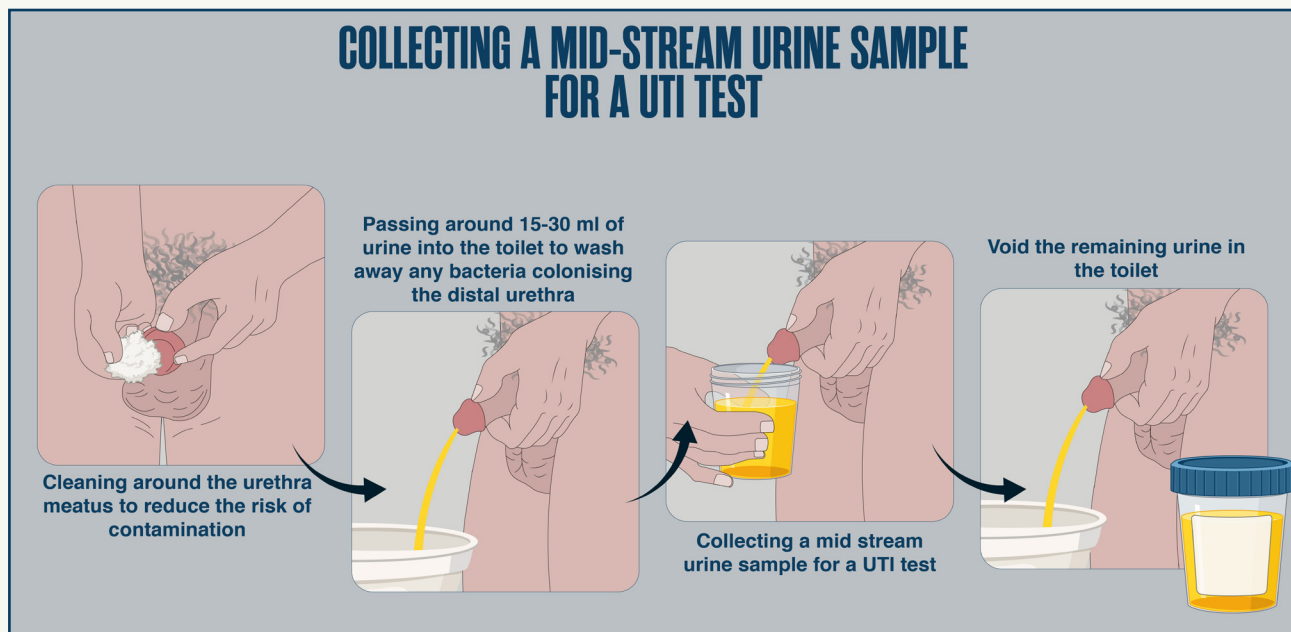
How do I collect a mid stream urine sample?

A mid stream sample is important to prevent contamination from commensal (normal) bacteria on the outside of the penis or vagina.



TREATMENT

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How are UTI's treated?

Urinary tract infections are managed with a course of oral antibiotics and pain relief. Usually empirical treatment is started after urine collection, with the course of antibiotics changed if isolated bacteria on sensitivity show resistance to standard treatments. It is crucial to take your urine sample before starting antibiotics. This is to ensure sensitivities for antibiotics on the causative bacteria are available in case therapy needs to change.

Painful urination is usually diminished within a few hours after the start of antimicrobial therapy. Some people report taking simple analgesics like panadol alongside alkalinising agents like URAL® to ease the burning and lower abdominal pain that can accompany UTI's.

UTI Prevention is better than cure, and thankfully, some simple practices can reduce the chances of UTI's.

1 - Wipe front to back: this is an obvious one for ladies, but important to reduce the chance of bacteria from the back passage moving forward towards the urethra.

It's always handy to have some of our [personal wipes](#) in your purse/bag to stay fresh on the go, wherever you are.

2 - Avoid potentially irritating feminine products: avoid douches, feminine deodorants and powders. They smell nice, but these can irritate the area and disrupt the pH which will predispose to UTI. Rather, wash the vulva (external part) only with warm water. Soap is not needed, but you can use a gentle, neutral, perfume-free one externally if you wish. And never wash yourself internally - the vagina is self-cleaning. This will ensure the pH and flora of your genitals not to be disrupted.

3 - Always, always pee after sex: try to make sure you go to the toilet and urinate shortly after, as this flushes out any bacteria that may have travelled to your urethra from your love making. Follow this with a healthy guzzle of water. Studies frequently show that women, who urinated within 15 min of intercourse, had a lower likelihood of developing a UTI than women who did not urinate afterward [9].

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What are the complications of untreated urinary tract infections?

Untreated UTI's can impair normal renal function, and bacteria can travel up the kidney system to infect the ureters and kidneys (pyelonephritis), and cause sepsis (where bacteria seeps into the blood-stream). Thus it is really important to get checked out and treated sooner rather than later.

What are the side effects with antibiotic therapy for UTI's?

Most people tolerate antibiotics well as they are used for a short period only, but some people may experience rash, dizziness, nausea, diarrhoea, or vaginal thrush.

4 - Wear loose clothing and cotton underwear: this will reduce changes to the flora in the area that can predispose to UTI's.

5- Use pH friendly lubricants: many lubricants on the market are not pH friendly to the acidic environment of the vagina and contain irritant ingredients. Both factors can predispose to UTI's, so look for one like our [Oh La La Love Lube](#) that has been specifically formulated to be kind and gentle to your skin.

6- Hydrate regularly: water is good enough, helping to dilute the urine and increase normal urination to flush out bugs. Traditional cranberry juice, though a commonly touted treatment and prevention strategy, is high in sugar and likely not of benefit.



REFERENCES

- [1.] <https://www.nhs.uk/conditions/gonorrhoea/symptoms/#:~:text=Symptoms%20of%20gonorrhoea%20usually%20develop,go%20untreated%20for%20some%20time.>
- [2.] <https://www.nhs.uk/conditions/chlamydia/symptoms/#:~:text=Most%20people%20who%20have%20chlamydia,disappear%20after%20a%20few%20days.>
- [3.] <https://sti.guidelines.org.au/sexually-transmissible-infections/chlamydia/>
- [4.] <https://sti.guidelines.org.au/sexually-transmissible-infections/gonorrhoea/>
- [5.] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3749018/>
- [6.] Wilson ML, Gaido L. Laboratory diagnosis of urinary tract infections in adult patients. Clin Infect Dis 2004; 38:1150.
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- [9.] Beisel B, Hale W, Graves RS, Moreland J. Clinical inquiries. Does postcoital voiding prevent urinary tract infections in young women? J Fam Pract. 2002;51:977.

