

Recurrent urinary tract infections



This booklet is designed to help women understand more about recurrent urinary tract infections and the choices available. Please keep it and take it with you to your appointments.

A collaborative process that allows patients and their providers to make health care treatment decisions together, taking into account the best scientific evidence available, as well as the patient's values and preferences.

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Infections affecting the urinary tract are very common; affecting most women at least once in their lifetime, but up to one in five women will have problems with repeated infections. They are most likely in women who are sexually active, pregnant or post-menopausal (gone through their 'change') but they can happen at other times.

A urinary tract infection (UTI) is the invasion of your urinary tract (urethra, bladder and kidneys) with bacteria, which then causes you symptoms.

Your symptoms will depend on the part of the urinary tract involved. For the purposes of this booklet we will be considering infections in the bladder, commonly called 'cystitis'.

The 'cystitis' symptoms you may experience with a UTI may include:

- A need to frequently pass urine
- An inability to hold your urine with a feeling of needing to pass your urine urgently
- A feeling of burning or stinging in the water pipe (urethra) on passing urine or pain at the end of passing urine.
- Sometimes you may also notice that your urine becomes cloudy, smelly or even stained with blood.

If you have a mild infection, it can often clear within a few days and may not always need antibiotics. More severe infections will probably require treatment.

The good news is that there are lots of things which you, your pharmacist, practice nurse or doctor can do to help you manage your recurrent cystitis.

However, if you experience blood in your urine without any other symptoms, please make sure you talk to your GP urgently so they can arrange to investigate it.



Why do women get urinary tract infections?

In women, there is only a short distance between the water pipe (urethra) and the back passage (anus).

The most common bacteria that cause UTI are *E. coli*. These bacteria ordinarily live inside our colon and are essential to keeping the colon healthy.

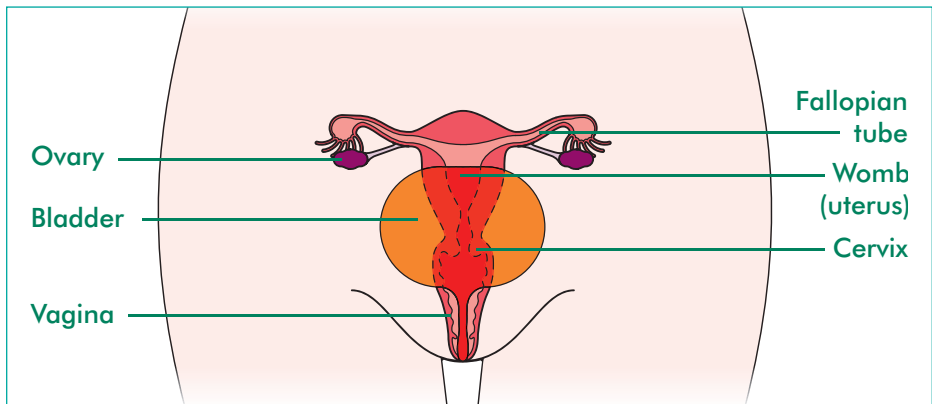
These bacteria from the colon are often spread when people open their bowels and because the water pipe is so close then this can lead to the bacteria gaining access to the urinary tract.

The body has its own defence mechanism to try and stop this happening - vaginal secretions. These secretions are rich in 'healthy' bacteria that help to stop these colonic *E. coli* from reaching the water pipe.

Common things like sexual intercourse, constipation and urinary or bowel incontinence can increase the risk of UTI by either disrupting the vaginal secretions/bacteria or by allowing overgrowth of the "healthy" bacteria with colonic bacteria.

Other things like soaps, wet wipes etc. can cause inflammation of the delicate genital skin and wash away vaginal secretions, and thus can also increase the risk of a UTI.

Often recurrent UTI can run in families and it is thought that there is a genetic reason for this with a mildly altered constitution of the urine making you more susceptible to UTI.



One of the most effective things you can do to help prevent cycles of recurrent infection is to make some simple changes to your lifestyle. These include:

- **Wiping “front to back”:** After going to the toilet it is important to push the toilet paper from the front, near your water pipe, towards your bottom. If you pull the paper from near your bottom towards your water pipe you can transfer bacteria closer to the water pipe, making it easier for them to cause an infection.
- **Drink plenty of fluids:** Many people just don't drink enough water or fluid. If urine is dark yellow or brown in colour it is showing you that you are dehydrated. If you do not drink plenty then people often do not pass urine frequently. This means the bladder stores urine for a longer time between emptying and so can act as reservoir of bacteria. You should try to drink enough fluid to keep your urine pale yellow or even clear. The lowest amount/day should be 1.5 litres of fluid but you should aim to drink 2 litres per day, unless you have been advised otherwise.
- **Avoid soaps, shower gels and “intimate hygiene” products:** Washing with soap or other products removes this natural protection of the vaginal secretions and can even cause chemical irritation, which promotes infection.
- **Limit washing the vaginal area to once a day:** Ladies with UTI often believe the infection comes as they are not clean enough and so try to improve hygiene in the vaginal area by washing more than once a day. This practice, unfortunately, has the opposite effect as it washes the ‘healthy’ vaginal secretions away.
- **Sexual hygiene:** Many women experience “honeymoon cystitis” or UTIs, which occur after having intercourse. Passing water and washing gently with warm water after sex can help reduce the amount of bacteria present which may cause infection.
- **Constipation:** Avoid constipation with a diet full of fibre and a healthy intake of fluid. If this is a continuing problem then this may be something you wish to discuss with your GP or nurse.
- **Incontinence:** Treating incontinence, whether urinary or faecal, can help reduce the risk of UTI, so if you are suffering with these symptoms please discuss this with your GP or practice nurse.

Please consider the following behaviours to help avoid contracting a urinary tract infection.

1. Wiping "front to back"	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. Keep urine pale yellow or clear by drinking plenty of fluid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3. Avoid intimate soaps, gels or wipes	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4. Only wash the vaginal area once a day	Yes <input type="checkbox"/>	No <input type="checkbox"/>
5. Sexual hygiene	Yes <input type="checkbox"/>	No <input type="checkbox"/>
6. Tackle constipation	Yes <input type="checkbox"/>	No <input type="checkbox"/>
7. Seek help with incontinence	Yes <input type="checkbox"/>	No <input type="checkbox"/>



What to do if I think I have a urinary tract infection?

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| 1. Do you have an increased urge to pass urine which is new? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
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| 2. Are you going to the toilet more frequently than is normal for you? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
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| 3. Does the urine feel unusually hot, or does it sting or burn during or after passing water? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
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| 4. Is the urine cloudy or smelly? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
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| 5. Are you having to get up at night to pass urine when you didn't before? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
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| 6. Do you have discomfort in the lower part of your abdomen or in your back? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
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| 7. Have you had any new episodes of leaking of urine or even bedwetting? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
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| 8. Are you feeling unwell or under the weather? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
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- | | | |
|---|------------------------------|-----------------------------|
| 9. Do you have these symptoms frequently? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
|---|------------------------------|-----------------------------|
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Not everyone needs to see his or her doctor for a simple UTI. Increasing your intake of water at the first sign of symptoms can sometimes be enough to flush out the bacteria before an infection can fully take hold. Other 'over-the-counter' preparations are available from pharmacies, which some people find effective. These include:

- **Cranberry juice and increasing fluids:** In mild cases of UTI simply increasing your fluid can be enough to simply flush through the infection.
- **Cystitis remedies:** There are several preparations available from pharmacies that help to change the acidity of the urine using a chemical called sodium citrate. These can make it more comfortable to pee while you are trying to flush out the infection. These are not suitable for people who need to avoid salt but are safe to use in all other people. They are often combined with some cranberry extracts.
- **Soda water or bicarbonate of soda:** Their use is along the same principle as cystitis remedies to change the acidity of the urine making it more comfortable to pass water as well as helping you flush out the infection.

What to do if the symptoms are not going away?

If your symptoms are not going away after trying some of the self help techniques or if they have persisted for more than two or three days, it is time to seek help from your GP or Practice Nurse.

It is very important that you provide a sample of urine for testing in a *sterile* container, available from your GP surgery. This should be collected from the first urine passed in the day when you wake up in the morning. You should try and collect a sample from midway through your stream.

For one-off 'uncomplicated' UTIs in younger women or infections where you have urinary symptoms but still feel well in yourself, a short course of antibiotics may be prescribed, usually for three days. If you are diabetic or have other risk factors then you may need a longer course of antibiotics. It is important to take all the tablets given to you, even if you feel better after the first few tablets, to make sure all of the bacteria are dealt with. Stopping the course early may mean your infection is not properly treated, even if you feel better. This can mean it will come back again very quickly. If you have fevers, vomiting, uncontrollable shakes and shivers (rigors) during your UTI, you must seek urgent medical help as it may mean you have an infection of your kidney.

If you are having recurrent infections, (three or more infections during one year), then investigation and further treatment may be recommended to you.

CHECKLIST

1. How often are you getting symptoms?
2. Do antibiotics fully clear it?
3. Do your symptoms return within 1 month?
4. Are they associated with sex?
5. Do you suffer from incontinence?
6. Have you notice your vagina has become sore or dry?
7. Is your urine always dark yellow or brown, suggesting dehydration?

Investigations

Please make sure you provide a urine sample for your GP every time you have a UTI. This allows a pattern of bacteria to emerge, which can guide further antibiotic use.

Overall, the chance of finding a condition that explains why you are getting recurrent UTI is very low.

Your GP/nurse may recommend an ultrasound scan of your kidneys/ bladder to look for kidney stones and see how well your bladder empties. If these are abnormal then you will need referral onto a urologist in the hospital.

If you are over 50, then you may also need an inspection of your bladder with an endoscopic examination by a urologist and your GP/nurse will discuss this with you.

The risk of resistance of bacteria to antibiotics is a major worldwide problem and antibiotic use must be kept to an absolute minimum so these alternative methods must be considered first:

- **Cranberry juice or cranberry extract capsules:** Having a glass of cranberry juice a day is used by many people as a preventative measure. However, the juices contain a lot of sugar, which isn't suitable for everyone, and some simply don't like the taste. To act as a preventive measure you would have to consume eight glasses of cranberry juice a day, which is not at all practical! Cranberry capsules are easily available are an alternative, and avoid the sugar and the need for eight glasses a day. There is evidence that it can reduce the risk of UTI.
- **Methamine hippurate (Hiprex):** This is a urinary antiseptic. It is a tablet that is taken twice daily and can be prescribed by your GP. It works by concentrating in the urine creating a hostile environment in your urine which helps to prevent bacteria from growing.

However, if your infections are still recurrent despite the above then following discussion with your health care professional you may need:

- **Post-Coital antibiotics:** Some sexually active women will know that they are likely to get cystitis after having sexual intercourse. For these women a single antibiotic within an hour of having sex can keep them well and stop the cycle of infection.
- **Self start antibiotics:** This approach is where your GP provides you with a prescription for antibiotics and a urine sample collection bottle. At the start of symptoms of an infection you collect a urine sample to take to your GP practice BEFORE you start taking the antibiotics. This allows you to start treating your infection earlier, but also collects a sample so that any organisms can be identified and if necessary, different antibiotics prescribed.

- **Low dose prophylactic antibiotics:** Prophylaxis means prevention of re-infection. This is where your GP gives you a low dose antibiotic tablet, usually to be taken at night, in order to prevent a build up of bacteria in your urine. This is sometimes referred to as “breaking the cycle of infection.” Antibiotics can be given for three months. However, when you stop taking the antibiotics your risk factors may not have changed so it is common for the cycle to start again. If you are on low-dose antibiotics it is still possible to get a UTI. If you become symptomatic while on low dose antibiotics it is important to take a urine sample for your GP to send away for analysis and to change your antibiotics.

This option is avoided as much as possible for the fear of creating multi resistant UTI and so is usually only employed when other methods have failed.



Women are prone to UTIs at times in their lives when their hormones are rapidly changing. This can be during puberty, pregnancy and in older age. There are many reasons why UTIs may be more common in older women.

For those reasons, in addition to the above treatments, the following will be considered in older women:

- **Previous pregnancies:** Childbirth and carrying a pregnancy alter your pelvic floor and can make it weaker. Prolapse of the vagina is very common and this can lead to changes in the ability of the bladder to empty properly. If the bladder is not emptying fully, a puddle of stale urine can be left behind which is at risk of becoming a source of infection. Your doctor or nurse could examine you to establish this if you feel this is affecting you.
- **Vaginal dryness:** As hormones change during and after the menopause, the tissues of the vagina can become dry and sore with loss of the 'healthy' bacteria and the normal secretions. This dryness is called 'atrophic vaginitis' and can contribute to recurrent infections. Your doctor should be able to diagnose this with a simple examination. Creams and pessaries containing oestrogen

may help reduce the dryness and the number of infections.

- **Not drinking enough water:** If you have other urinary problems such as urgency or needing to go to the toilet very frequently, it can be tempting to reduce your fluid intake to not need to pass urine so often. However, this can make you prone to infections. If you think this is a problem for you, please discuss this with your GP.
- **Incontinence:** Leakage of urine as women get older is sometimes something that women feel they 'just have to put up with' as part of ageing. Previous pregnancy, childbirth, overweight and chronic conditions such as lung disease and constipation can all contribute. Wearing pads to cope with incontinence can increase your risk of UTI so if you are suffering with this you may want to talk to your GP or nurse about addressing the incontinence.



All urinary tract infections in pregnancy are potentially serious and should be treated with appropriate antibiotics. If you are concerned you have a UTI during pregnancy please seek urgent attention from your midwife, GP or obstetrician.

During pregnancy your midwife or GP will regularly screen your urine so that infections can be diagnosed and treated early.



Is your treatment of your recurrent UTI helping?

This checklist will help you and your doctor or nurse work out what to do next. Please be as honest as you can when you fill it out so that your healthcare worker can give you the best possible advice to suit you.

Your symptoms

Have your symptoms improved since you began treatment? Yes ☐ No ☐

If so, which treatment do you feel had the biggest impact?

Are you still getting more than three infections in 12 months?

Yes ☐ No ☐

Things you have already tried

Increasing your fluid intake: How much fluid do you drink now?

How has this affected your infections?

Hygiene and sexual hygiene

Have using the tips about hygiene improved your infections?

Yes ☐ No ☐

Over the counter remedies

Have you tried:

Cranberry juice or tablets?

Yes ☐ No ☐

Cystitis sachets (citrate)?

Yes ☐ No ☐

Lots of fluids at the first sign of symptoms?

Yes ☐ No ☐

Any other over the counter remedy?

Yes ☐ No ☐

Have you had to see your doctor for antibiotics?

Yes ☐ No ☐

If yes, have you been given:

Hiprex

Yes ☐ No ☐

Self-start antibiotics?

Yes ☐ No ☐

Low dose long term antibiotics?

Yes ☐ No ☐

Oestrogen cream or pessary?

Yes ☐ No ☐

Have any of these helped?

If the different treatments you have been trying have not been successful or your ultrasound is abnormal then your GP/nurse may refer you to hospital to see a Urologist.

Please bring your bladder diary and this booklet with you, as it will be a valuable aid to help your specialist assess your infections and the treatments you and your doctor have tried. Together, you will then review the things you have been doing and talk about whether it would be appropriate to try alternative treatments or treatments in combination.

You may also be referred for additional investigations, to give your specialist more information about whether there are other reasons why you might be getting recurrent infections. These can include:

- **Ultrasound scan of the kidneys and bladder:** (if not done already). This is to investigate if there were any problems with the flow of urine down from the kidneys into the bladder, or if there were any problems in the kidney, such as kidney stones, which might provide a place for bacteria to hide. If stones are found then these will need to be treated.
- **Cystoscopy:** This uses a flexible camera, called an endoscope, to look inside your body so that your specialist can assess the lining of your bladder and water pipe. It is used to rule out other causes of infection or cystitis-like symptoms and generally reserved for older women as it adds little to the investigation of younger women with recurrent UTI.
- **Post-void residual bladder scan:** This is a short ultrasound scan of the bladder, done immediately after passing urine, to see if the bladder is emptying properly. If your bladder is not draining properly you will require further tests to find out why your bladder is not emptying fully so this can be addressed.

Medical:

Generally, a combination of the treatments suggested will treat and control most women's recurrent UTIs.

However, if these fail then use of agents that can be placed in to your bladder can help some women:

- **Hyaluronic acid:** This treatment is instilled in to your bladder weekly using a small catheter temporarily placed in to your bladder. The medication aims to reline your bladder making it harder for bacteria to attack its lining. This treatment takes 1 hour/week for 6-12 weeks and then its results are assessed. If this helps then you will undergo 'top-ups' as required.

Surgery is only helpful for women who have had an abnormality shown by their ultrasound scan, vaginal examination or cystoscopy.

If this is the case then your urologist will guide you towards the right treatment.

Surgery has no role in women without abnormalities found on the above examinations.

It is much more likely that with careful attention and a combination of lifestyle measures together with sensible use of antibiotics, your recurrent infections can be managed successfully or even resolved.

... is helping patients become involved in their own healthcare decisions.*

Normally there will be choices to make about your healthcare. For example, you may be asked:

- to decide whether or not you want to have treatment
- to choose between different types of treatment
- if you want to continue with the same treatment

What you choose to do should depend on what is important to you.

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.

Ask 3 Questions

To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?



*Ask 3 Questions is based on Shepherd HL, et al. Three questions that patients can ask to improve the quality of information physicians give about treatment options: A cross-over trial. Patient Education and Counselling, 2011;84: 379-85

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Jeżeli potrzebujesz pomocy w zrozumieniu tych informacji w swoim języku zadzwoń na podany poniżej numer.

Polish

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Portuguese

Jeigu jums reikia supasi šia, informacija, kita kalba prašom skambinti šiuo numeriu apačioje

Lithuanian

Kung kailangan mo ng tulong para maunawaan and inpormasiy on sa pamamagitan ng ibang salita, maaaring tumawag sa

Tagalog

Pour avoir cette information dans une autre langue ou format, y compris audio, braille ou une grande taille, appelez le numéro ci-dessus.

French

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