

## How can I stop the infections?

The most important thing is to wee regularly and completely. Use the 'Relaxed Weeing' ideas in the other pamphlet and wee at least 4 times a day.

Use cranberry (tablets, fruit or juice). We don't know how much but it seems sensible to use something each day.

Use a cream for sore, itchy skin instead of scratching or putting up with it - this may vary from something bland to steroid creams.

Make sure your pooing is fine - that you're not constipated and not soiling. If there are any problems, you'll need to fix that.

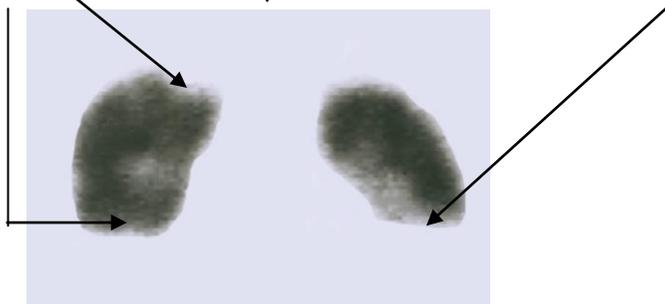
Drink well. How much? Since this is NOT an important thing, don't make too big a deal of it. However, about 40ml of any fluid for each kilogram of your body weight is a reasonable goal for each day.

There are some children who seem to benefit from short term use of diluted Tea -tree on their perineal skin. We use "disinfectant" strength for this.

Try not to use antibiotics unless you need them for an infection

## Are the infections doing me any harm?

There are 2 things they could hurt. The most important one is the kidneys. I'll tell you if we need to worry about that. If we are worried, we'll do a scan called "DMSA". Usually it is normal. However, in the one below, there is scarring on the top and bottom of the kidney on the left and on the bottom of the right.



The other area of concern is the bladder. We think, but aren't sure, that this sort of problem (wetting and urine infections as a child) causes permanent problems with urine control and repeated infections in later life.

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# Urinary Tract Infections

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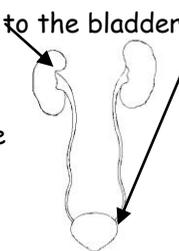


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## What are they?

The 'urinary tract' is everything from the kidneys to the bladder. So a 'urinary tract infection' is a very general term. Another general term is 'respiratory tract infection' - this could mean an infection in the throat, nose, windpipe, lungs or any combination of these.

In the urinary tract, it's most common simply to get a bladder infection - we call this 'cystitis'. However, if you have an infection in your kidney (called 'pyelonephritis'), you'll also have one in your bladder - because the urine drains to the bladder.



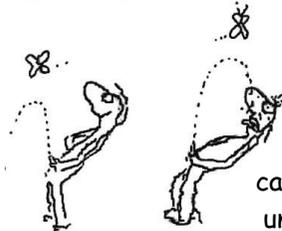
## Why do you get a UTI?



There are lots of reasons.

① Sometimes there are things wrong with the way you're made - we call those '**anatomical**' reasons. Most of the time, everything is perfectly formed.

① **How you wee.** This is probably the most important thing. There are 2 ways you can get urine infections from not weeing properly. The most common reason is not letting all the wee out and the second is not going to the toilet much (being a camel!). To explain 'not letting it all out', you have to understand a bit of how the bladder works...



The bladder fills without you knowing. When it gets full however, it squeezes hard and you want 'to do a wee'. Of course it's your bladder that really wants to - not you. When you get to the toilet, your pelvic floor ('butt')

muscles are supposed to relax and the bladder pushes the wee out. When babies wee, they often stop and start. This is because their pelvic floor muscles aren't relaxed, the bladder won't keep pushing and it keeps some wee inside. Some children don't grow out of this.

In rare situations, the bladder is not strong enough even if

the pelvic floor is relaxed.

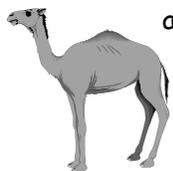
Some questions:

*Can you tell if it's happening?* No. The wee stops coming out and you feel empty.

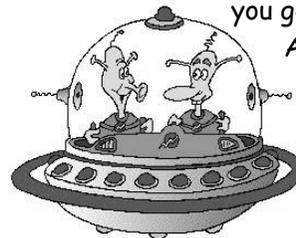
*How does the infection happen?* If you've got some bugs inside your bladder at the time (and all of us do from time to time), they won't get washed out like they usually do and they grow into an infection.

*The next thing that happens* is that the bladder seems to get annoyed. It starts to play tricks like squeezing when it isn't full and not finishing a squeeze when it starts. When this happens, you might: want to rush to the toilet, get wet undies when you didn't even feel full (because you weren't full!), rush to the toilet and the wee won't start straight away (or at all!).

*How can you help the muscles to relax?* Sit comfortably and don't push. There is a full explanation in the 'Relaxed Weeing' pamphlet. If you've got a camel bladder and wee once or twice a day, you need to drink heaps more and use the relaxed weeing ideas mentioned above.



① **Aggressive (or invasive) skin germs.** We have germs ('bacteria') all over and inside our body. Most of the time they live peacefully with us. If you get an unfriendly one on your genital skin it can invade your body and cause a urine infection. The same kind of thing happens on other parts of your body eg when you get a pimple on our skin from an invasive staph germ.

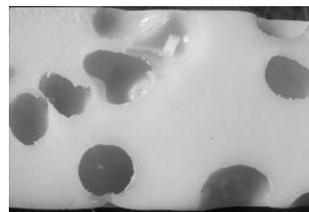


Although there are many things that can change skin germs, we can't predict how to make friendly ones.

Using lots of antibiotics for a long time can cause germs to change to invasive types. It doesn't mean you shouldn't use antibiotics but that we should try to fix other things before using them.



① **Abnormal skin.** Some children have problems with their genital skin. Mostly this is an irritation caused by wetting but can also be from eczema or lichen sclerosis- big names for common problems! When the skin barrier is broken by these skin conditions, bugs (even friendly ones!) can climb up into the bladder.



① **Defects in the bladder lining or immunity.**

There's a special layer covering the bladder cells. It stops urine directly contacting the cells. If there are breaks in it, bugs can catch hold of the cells and stick - so they are hard to wee out and you get an infection.

This layer is called the 'glycosaminoglycans layer' - in case you wanted to know 😊

① **Constipation.** You use the same nerves and muscles for weeing as you do for pooing. It's no surprise that if either your weeing or pooing aren't working properly, the other one is often affected.