Urinary tract infection (UTI)

What is a urinary tract infection?
A urinary tract infection (known as a UTI) is an infection in the urethra, bladder and/or kidneys. UTIs are common in children. Approximately 1 in 10 girls and 1 in 50 boys will have had an infection by seven years of age. Infections in children under one year are more common in boys but in older children infections are more common in girls.

What is causes it?
UTIs are caused by bacteria that enter the body and travel up the urinary tract causing an infection.

Signs and symptoms
• stinging or burning when passing urine
• feeling the need to pass urine more often
• smelly urine
• pain in the tummy or back
Babies with a UTI may have a range of symptoms including fever, vomiting, being unsettled, feeding less or pale skin.

How is it diagnosed?
A doctor can diagnose a UTI by testing a sample of your child’s urine.
The doctor can test the urine sample immediately if your child is over two years old. If positive, it is likely that your child has a UTI. The sample still needs to be sent to the laboratory to confirm the diagnosis and find out which antibiotics are best to treat the infection. This takes one to two days. In younger children the immediate testing is less reliable, and the sample will need to be tested in the laboratory.
More tests may be required if your child is very unwell, very young or has had a lot of UTIs. Your doctor will discuss this with you if needed.

Collecting a urine sample
It is important that the urine sample is not contaminated by germs from the outside when it is collected as this may lead to a wrong diagnosis.
Your doctor or nurse will explain the best way of getting a urine sample from your child.
You may be given a urine jar to take home to collect the urine. See the factsheet (details below) for advice on how to collect a clean urine specimen. The sample collected should be taken to your doctor within four hours to be tested.

What is the treatment?
UTIs are treated with antibiotics. Usually the antibiotics needed are a liquid or tablets that can be taken at home.
If your child is less than three months of age or very unwell, it is likely they will be admitted to hospital to have antibiotics through a drip (intravenously).
The earlier the treatment is started the better. If the doctor suspects your child has a UTI they will start him/her on antibiotics once a sample has been collected for testing at a laboratory. The type of antibiotics may be changed when the test results are available from the laboratory.
Antibiotics usually need to be taken for three to five days. It may take a day or two until your child’s symptoms start to improve.
Care at home

Paracetamol (Panadol) or Ibuprofen (Nurofen) may help with your child’s symptoms. Follow the instructions on the packaging to make sure you give your child the correct dose. Ural sachets may help with the pain in adolescents. They can be purchased from a pharmacy.

Keep in mind that these medications will not cure the infection. Your child will still need to take the antibiotics. Make sure you attend the follow-up appointment with your doctor to check your child is taking the right antibiotics.

It is important that your child drinks enough fluids. Offer regular sips of fluids that contain sugar such as diluted juice or milk. If your child is in nappies, count how many wet nappies they have in a day. They should have at least half the usual number. For older children, keep track of how often they pass urine and the colour. Not going to the toilet much and dark coloured urine are signs of dehydration.

Prevention

Here are some things that can be done to help prevent another infection:

- manage constipation (see fact sheet)
- drink enough fluid so that urine is clear and light-coloured
- for girls, wipe front to back in toileting
- wear breathable fabric underwear (not synthetic)

Things to remember

- Urinary tract infections (UTIs) are a common infection in children that are caused by bacteria.
- Infections are diagnosed by testing a sample of urine.
- Infections are treated with antibiotics.
- See your doctor early if your child complains of problems passing urine, smelly urine or feeling like they need to pass urine more frequently.
- If your child has been started on antibiotics, make sure you go to the follow-up appointment with your doctor to check your child is taking the right antibiotics.

Further information

Related fact sheets on how to collect a urine specimen and constipation can be found on the Children’s Health Queensland Hospital and Health Service website www.childrens.health.qld.gov.au/

Search for “CHQ fact sheets” or scan the code below with the camera on your phone:

Urine collection

Constipation

When should I see a doctor?

See a doctor if your child:

- has signs or symptoms of a UTI
- has been diagnosed with a UTI and
  - is not improving after two days of taking antibiotics
  - is having trouble taking the antibiotics or is vomiting
  - isn’t drinking enough fluid
  - develops back pain
- has any other health problem that are worrying you

In an emergency, always call 000 immediately. Otherwise, contact your local doctor or visit your nearest hospital emergency department. If it’s not an emergency but you have concerns, contact 13 Health (13 43 2584). Qualified staff will give you advice on who to talk to and how quickly you should do it. You can phone 24 hours a day, seven days a week.

All information contained in this sheet has been supplied by qualified professionals as a guideline for care only. Seek medical advice, as appropriate, for concerns regarding your child’s health. Resource No: FS348 developed by Emergency, Queensland Children’s Hospital. Updated: August 2019