The main goals of bladder management are to:
1. Maintain good kidney function and prevent any kidney damage
2. Achieve and maintain social continence

What problems can occur with the bladder?
The role of a healthy bladder is to store urine and to empty at appropriate times. People living with Spinal Cord Injury can have what is known as a neurogenic bladder. This means that the brain and the bladder are not working together as well as they should. The two main problems that occur with the bladder are:
   • They don’t empty properly (retention)
   • They allow urine to leak either some or all the time (incontinence).

Bladders that do not empty completely
A bladder will not empty if the muscle that controls the opening (the sphincter) remains closed all the time. The urine is then unable to pass through. If too much urine builds up in the bladder, it will cause a rise in pressure. This will then force the urine back via the ureters into the kidneys. Over time, this will cause pressure on the kidneys that if left untreated will damage the kidneys. Urinary tract infections (UTI’s) can also be a problem if the bladder is not emptied of urine. Urine may appear cloudy, discoloured, may have a strong fishy smell and can lead to pain when passing urine. Repeated UTI’s can lead to kidney infections and kidney damage.

The usual way to manage this type of bladder is with clean intermittent catheterisation (CIC). Intermittent catheterisation is used to improve urinary control for people with abnormal bladder function. It reduces the incidence of urinary infection, and helps relieve pressure on the kidneys thus assisting the kidneys to remain healthy. A disposable catheter (plastic tube) is inserted into the bladder via the urethra to empty it. It is not a sterile procedure but cleanliness is essential. Once the catheter has drained as much urine from the bladder as possible it is slowly removed. Timing of this can vary but the same technique is usually repeated up to 6 times a
day at regular intervals. This is done during the daytime, but usually not at night while asleep. It is important to drink sufficient fluids. This will help to avoid urinary tract infections and maintain good bladder health.

**Bladders that leak urine**

Bladders will leak urine if the muscle that controls emptying (sphincter) is relaxed most of the time. These types of bladders can still have risks of infection and kidney health will need to be monitored. It is most important with this type of incontinence to remain clean and dry, and prevent odour and wet clothing. Some medications can be useful to improve urine storage in the bladder and reduced leakage which will be advised by your treating doctor and nurse on their use. Special attention needs to be given to the skin to prevent rashes and skin injuries.

**Management of Urinary Tract Infections (UTI’s)**

Urinary Tract Infections (UTI’s) can be caused by:

- Not emptying the bladder properly and urine stays behind for a long time. This allows bacteria to grow in the urine.
- Unclean catheter techniques
- Chronic constipation causing difficulties with bladder drainage.

The symptoms indicating someone has a UTI are:

- Unusual wetting between CIC,
- Stinging when passing a catheter.
- Blood staining of the urine.
- Abdominal pain.
- Fever.
- Headache.
- Back pain.
- Decreased appetite and
- Vomiting and a general feeling of being unwell.

Cloudy smelly urine alone is not sufficient to make the diagnosis of a UTI and can usually be treated by:

- Drinking more (dilution of the urine) and
- Performing an extra catheter (emptying the bladder more frequently) or
- Occasionally by using medications that prevent bacteria to stick to the bladder wall.

Only when these strategies have not worked and the person becomes ill are antibiotics used.

If antibiotics are given unnecessarily, a resistance against the more common antibiotics will develop. If an infection is multi-resistant it can only be treated successfully with intravenous antibiotics.

UTI’s only need treatment with antibiotics when they cause the person living with Spinal Cord Injury to be sick (symptomatic UTI).

**Further information about Spinal Cord Injury is available at:**

- The agency for clinical innovation have a series of factsheets available under the Spinal Cord Injury tab: www.aci.health.nsw.gov.au/resources/consumer-resources
- Paraquad NSW has a series of factsheets about Spinal Cord Injury: www.paraquad.org.au

You can find further information about bladder management and spina bifida at:

- Information about continence management, products and funding available can be found at www.enable.health.nsw.gov.au
- The National continence helpline is 1800 33 00 66
- The National public toilet map details accessible bathrooms and has information for how you can apply for a MLAK (Masters’ locksmiths association key) which is a specially designed key to allow you 24 hour access to accessible public toilets www.toiletmap.gov.au

**Remember:**

- Drinking water regularly is important for good bladder health.
- Empty the bladder regularly.
- The clinic nurse is available for advice, support and education with catheterising techniques.
- It is important to stay clean and dry.
- Speak to a health professional when the urine changes colour, becomes cloudy or has developed a strong smell.
- Only treat symptomatic UTI’s with antibiotics.