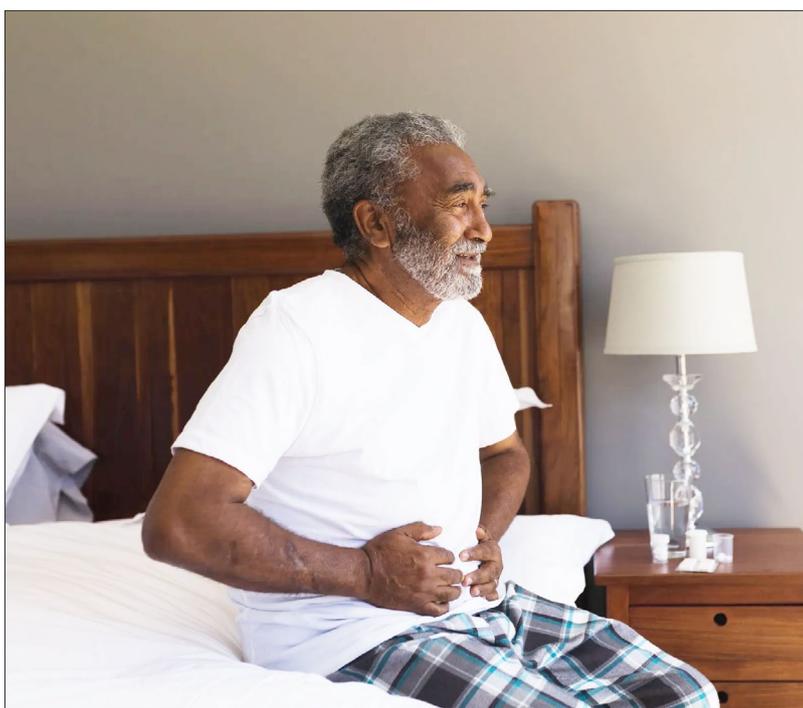


## Neurogenic Bladder Dysfunction

**Neurogenic bladder dysfunction (NBD), also called neuropathic bladder disorder, is a medical condition where the bladder does not work properly because of damage to the nerves that control it. This condition often affects people with spinal cord injuries, multiple sclerosis, stroke, or spina bifida. Managing it well is key to protecting kidney function, preventing infections, and improving quality of life. Around the world, NBD affects about 1 in 5 people with nerve-related conditions. In South Africa, exact numbers are not well known, but it is a common problem in people with spinal cord injuries and other nervous system disorders.**



### What is Neurogenic Bladder Disorder?

Neurogenic bladder disorder happens when nerves that control the bladder are damaged. This affects the ability to store urine, feel the urge to urinate, or empty the bladder completely. Normally, nerves tell the bladder when it is full and when to release urine. If these nerves are damaged, the bladder may be overactive (urine is released involuntarily) or underactive (does not empty properly).

### What are the signs and symptoms of Neurogenic Bladder Disorder?

Symptoms can vary depending on the underlying condition and severity of the nerve damage. Common signs include:

- Leaking urine (incontinence).

- Frequent urination or a sudden, intense urge to urinate.
- Difficulty starting to urinate.
- Weak or slow urine stream.
- A feeling that the bladder is not emptying completely after urinating.
- Frequent urinary tract infections (UTIs).
- Waking up several times at night to urinate (nocturia).

### What are the causes/risk factors?

You may be at higher risk if you:

- Have experienced a spinal cord injury due to trauma, infection, or surgery.
- Have certain medical conditions, such as diabetes mellitus, multiple sclerosis, Parkinson's disease, or stroke.
- Were born with congenital conditions, like spina bifida

- (a birth defect affecting the spinal cord), sacral agenesis (part of the lower spine is missing), or cerebral palsy (brain damage before or after birth).
- Are older, as nerve function may decline with age.
- Have had prolonged use of urinary catheters.

## How is Neurogenic Bladder Diagnosed?

Diagnosis includes:

- Medical history and physical examination by a trained doctor.
- Bladder function tests, such as urodynamic studies (tests to measure bladder pressure), to assess how well the bladder stores and releases urine.
- Bladder scans or ultrasounds to measure how much urine remains in the bladder after urinating.
- Urine and blood tests to check for infections or kidney damage.
- Specialised investigations like abdominal X-rays may be needed if symptoms are complex or if complications are suspected.

In South Africa, assessments are usually done by a general practitioner (GP), urologist, or neurologist with experience in spinal injuries or neurological disorders.

## How do you prevent Neurogenic Bladder Disorder?

While not all causes can be prevented, early treatment of underlying conditions like diabetes and high blood pressure can help prevent long-term complications. After a spinal injury or stroke, bladder function should be regularly checked to catch problems early.

Other ways to help prevent complications:

- Avoid bladder overfilling (do not hold in urine too long).
- Drink enough fluids (unless advised otherwise).
- Manage blood sugar if diabetic.
- Practice good hygiene to prevent infections.

## How to treat or manage the condition?

Treatment depends on the type and severity of the bladder problem. It may include:

a) Lifestyle & non-medical options:

- Urinating at regular intervals.
- Fluid and dietary management.
- Pelvic floor exercises (if some muscle control remains).

b) Medical treatments:

- Medications to relax or stimulate the bladder.
- Intermittent catheterisation (inserting a thin tube to drain urine).

- Indwelling catheters for long-term management.
- Assistive devices such as commodes (special toilet seat to help with urination).
- Bladder training programs to encourage better control.

c) Surgery

- In serious cases, doctors may need to perform surgery to either make the bladder bigger or create a new way for urine to leave the body.

d) Mental Health Support

- Since bladder issues can affect self-esteem and independence, mental health screening and support should be part of comprehensive care.

## Complications of Neurogenic Bladder Disorder

- **Urine leaks (Incontinence):** Accidental urine leakage can occur because the bladder muscles are not functioning properly.
- **Inability to empty the bladder (Urinary retention):** Sometimes the bladder does not empty completely, which means urine stays inside longer than it should.
- **Repeated bladder infections (Urinary Tract Infections or UTIs):** If urine stays in the bladder too long, it can lead to infections that keep coming back.
- **Kidney damage:** When urine backs up into the kidneys due to poor bladder function, it can cause serious damage to the kidneys over time.
- **Bladder Stones:** Not fully emptying the bladder can cause stones to form, which may lead to pain or more infections.
- **High bladder pressure:** If the bladder gets too full too often, it can build up pressure and hurt the bladder and kidneys.
- **Social and emotional impact:** People with this condition might feel embarrassed, anxious, or stressed about leaks or accidents.
- **Skin irritation or breakdown:** Constant wetness from leaking urine can cause rashes, sores, or infections on the skin.

## What is covered under PMB level of care?

Neurogenic bladder disorder is covered under the Prescribed Minimum Benefits (PMBs) in two ways, depending on the underlying cause:

1. If due to a non-progressive neurological condition or spinal injury: It is included in the PMB Regulation under "*Difficulty in breathing, eating, swallowing, bowel, or bladder control due to non-progressive neurological (including spinal) condition or injury*".

This means PMB level of care must be funded if the bladder dysfunction is caused by a stable condition such as cerebral palsy, spina bifida, or a stable spinal cord injury.

2. If the bladder dysfunction is caused by a progressive neurological condition on the Chronic Disease List (CDL), like Multiple Sclerosis or Parkinson's disease, it must be covered.

*The PMB regulations mention that the diagnosis, treatment, and care costs of PMB conditions must be funded irrespective of the member's plan when a designated service provider is used. Medical schemes must pay for in and out-of-hospital costs in full if the services were obtained from a DSP. In cases of involuntary use of a non-DSP, healthcare services must still be paid in full.*

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