What is erectile dysfunction?
Erectile dysfunction (ED) is when a man is unable to get and/or keep an erection that allows sexual activity with penetration. It is not a disease, but a symptom of some other problem, either physical or psychological or a mixture of both.

How common is erectile dysfunction?
Erectile dysfunction is very common and becomes more common as men age. An Australian survey showed that at least one in five men over the age of 40 years has erectile problems and about one in ten men are completely unable to have erections. With each increasing decade of age, the chance of having erectile problems increases.

How does an erection happen?
Getting an erection is a complicated process. There are two tubes of spongy tissue that run along the length of the penis. A tough fibrous, partially elastic outer casing surrounds this spongy material. When stimulated by the nerves, the spongy tissue arranges itself in such a way that more blood can be stored in the penis. The veins running through the outer sheath of the penis then compress which stops the blood from leaving the penis. As the blood is stopped from flowing out, the penis fills with blood and stretches within the outer casing, giving an erection.

CAUSES OF ERECTILE DYSFUNCTION

- Psychosocial problems
  - Performance anxiety
  - Sexual attitudes and upbringing
  - Relationship problems
  - Employment and financial pressures
  - Depression
  - Psychiatric disorders

- Interference with nerve function
  - Spinal cord trauma
  - Multiple sclerosis
  - Diabetic neuropathy
  - Pelvic surgery (prostate, bowel)
  - Parkinson’s disease
  - Alzheimer’s disease

- Reduced blood flow
  - Atherosclerosis (narrowing of the arteries)

- Interference by drugs, alcohol and medicines
  - Alcohol and drug abuse
  - Medicines used to treat:
    - Hypertension (high blood pressure)
    - High cholesterol
    - Depression and psychiatric disorders
    - Prostate cancer
  - High cholesterol
  - Cigarette smoking
  - Sleep apnoea

- Metabolic problems interfering with blood vessel function (endothelial dysfunction)
  - Diabetes
  - Hypertension (high blood pressure)
  - Obesity
  - Cigarette smoking
  - Sleep apnoea

- Urological problems
  - Peyronie’s disease
  - Pelvic trauma

- Endocrine problems
  - Thyroid disease
  - Acromegaly (a condition caused by too much growth hormone)
  - Cortisone excess
  - Hypogonadism (a condition where the testes are not able to make enough testosterone [androgen deficiency] and/or sperm [spermatogenesis])

In both the spongy tissue and blood vessels, muscle cells react to chemicals in the body; some make an erection happen and some make the penis flaccid (soft). The balance of these chemicals controls whether the penis is hard or soft.

What causes erectile dysfunction?
Many factors can affect a man’s ability to get and keep an erection and several factors may be present at one time. Commonly there is a combination of physical and psychological factors. Sometimes there is no clear reason for the erectile dysfunction; however, most cases of erectile dysfunction have a physical cause.

Is erectile dysfunction just part of getting old?
Like the rest of the ageing body, muscle tone in the penis reduces with age, as do many other aspects of sexual function. It can take longer for a man to get fully aroused. It may take much longer before a second erection happens compared to when the man was younger, and usually the erection is not as firm.
Where can I get help for erectile dysfunction?
The local doctor (GP) is the best first point of contact if you have erectile problems, whether or not you want to have sex. The reason for this is that erectile dysfunction may be a symptom of underlying medical conditions such as diabetes or heart disease. It is important to talk openly to a doctor about any problems with sexual functioning.

What happens when I see a doctor for erectile dysfunction?
After taking a history of sexual function and general medical factors, the doctor will do a physical examination that may include checking the penis and testes and, in older men, the prostate. Blood tests are often done to check glucose (sugar), cholesterol and testosterone levels.

How is erectile dysfunction treated?
For most men, erectile dysfunction cannot be cured; for some there may be a reversible underlying cause. For this reason, it is important to assess all men with erectile problems to see if there is a treatable cause. Usually there will not be a specific treatment that will lead to the improvement of erectile dysfunction. However, there are treatments that will allow erections to happen and can be used to allow sexual activity to take place. There are three main types of treatments: non-invasive treatments such as tablet medicines and external devices (e.g. vacuum device); penile injections; or for men who have not had success with other treatments, surgery may be an option.

What are the tablet medicines for erectile dysfunction?
Tablet medicines for erectile dysfunction are called phosphodiesterase-5 (PDE5) inhibitors, which refers to the chemical mechanism of these treatments. There are three PDE5 inhibitors currently available in Australia: sildenafil (Viagra®), tadalafil (Cialis®), and vardenafil (Levitra®). PDE5 inhibitors work well and are safe for treating most men with erectile dysfunction, allowing intercourse in about 70 per cent of users.

What external devices are available for erectile dysfunction?
Vacuum devices are cylindrical tubes that are placed over the penis. As air is pumped out of the cylinder, the pressure build-up helps to draw blood into the penis, causing the penis to enlarge. A rubber ring is then placed around the base of the penis to keep the erection.

What are injection treatments for erectile dysfunction?
A penile injection (such as Caverject Impulse®) increases blood flow when injected into the penis, causing an erection. Injections can be used if oral medicines don’t work or can’t be used.

What is a penile prosthesis?
A penile prosthesis is a device that is surgically implanted into the penis and can allow erections to happen through a mechanism of squeezing on a specific part of the device.

Men who have failed to get a good erection with other treatments might be suitable for penile prosthesis.

What are the new treatments for erectile dysfunction?
Low-intensity extracorporeal shock wave therapy has been proposed as a new non-invasive treatment for erectile dysfunction caused by problems with blood vessels. Shock wave therapy machines are now available in some medical practices in Australia. Although there is some evidence that it may help a proportion of men with erectile dysfunction, more research is needed before clear recommendations on its use can be made.

Is counselling important for treating erectile dysfunction?
Psychosocial problems are important and may cause erectile dysfunction by themselves or together with other causes of erectile dysfunction, such as diabetes and heart disease. Relationships are complicated and many factors cause tensions, which can affect sexual relations. For some men, these problems can become ongoing and it can help to talk through the issue with a skilled counsellor. It is important to know that the longer erectile dysfunction is left untreated, the greater the effect on relationships. This is another reason why early treatment of erectile dysfunction is important.

Is sex important to older men?
It is common for a healthy older man to still want sex and be able to have sex within appropriate limitations. Understanding what is normal in older age is important to avoid frustration and concern. Older men and their partners often value being able to continue sexual activity and there is no age where the man is ‘too old’ to think about getting help with his erection or other sexual problems.

Can I do anything to prevent erectile dysfunction?
Although not proven, it is likely that erectile dysfunction can be prevented by good general health, paying particular attention to body weight, exercise, and cigarette smoking. For example, heart disease and diabetes are problems that can cause erectile dysfunction, and both are preventable through lifestyle changes such as sensible eating and regular exercise. Furthermore, early diagnosis and treatment of associated conditions like diabetes, hypertension and high cholesterol may prevent or delay erectile dysfunction, or stop the erectile dysfunction from getting more serious.