



Erectile Dysfunction (impotence)

fact sheet

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What is Erectile Dysfunction?

Erectile dysfunction is an inability to get and/or keep an erection that allows sexual activity with penetration.¹

It is not a disease, but a symptom of some other problem, either physical, psychological or a mixture of both.

Erectile dysfunction should not be confused with low libido (little interest in sex) or the inability to reach an orgasm or ejaculate. Premature (too early) and retrograde ejaculation (into the bladder) are also different problems that need a different approach to diagnosis and treatment.

Occasional erectile dysfunction is normal. There is no need to worry about the occasional failure to get or keep an erection. Some of the causes of occasional erectile dysfunction include excessive intake of alcohol, anxiety and tiredness. One of the most common causes of erectile dysfunction in middle-aged men is lack of sleep.

How common is erectile dysfunction?

Erectile dysfunction is very common and becomes even more common in older men. A recent survey done in Australia shows that at least one in five men over the age of 40 years often experience erectile problems, and about one in ten men are completely unable to have erections.² With each decade of age, the chance of having erectile problems increases.

How does an erection happen?

At a superficial level, getting an erection is a simple process. There are two tubes of spongy tissue that run along the length of the penis, and this spongy material is surrounded by a tough fibrous, partially elastic covering.

A message is sent through nerves that leave the lower spinal cord, telling the blood vessels entering the spongy tissue of the penis to let more blood in. The flow of blood out of the penis is then blocked off so the penis fills with blood and stretches within the outer casing. This creates an erection.

Underlying this relatively simple explanation is a very complex range of chemicals in the body that also work together to get an erection. At any one time, the muscle cells in the spongy tissue and in the blood vessels are influenced by a balance of chemical factors, some which cause an erection and some which encourage a flaccid (soft) penis.

What causes erectile dysfunction?

Many factors can interfere with getting an erection and often two or three factors are present at one time. Sometimes there can appear to be no obvious cause for the erectile dysfunction; however, most cases of erectile dysfunction are physical in origin.

Apart from the physical causes of erectile dysfunction due to an event such as prostate surgery or the introduction of a medication that affects sexual function, erectile dysfunction due to physical causes often begins gradually.

There are many diseases that interfere with how the penis functions by either reducing blood flow or affecting the nerves. Importantly, when the first signs of erectile dysfunction happen, there is often an unknown underlying cause such as diabetes, hypertension or high cholesterol.

About one in 10 cases of erectile dysfunction is caused by psychological factors. A man's sex drive (libido) can be affected by stress such as problems at work or financial worries.

Table 1: Known causes of erectile dysfunction include:

Psychosocial issues	<ul style="list-style-type: none"> • Performance anxiety • Sexual attitudes and upbringing • Relationship problems • Employment and financial pressures • Depression • Psychiatric disorders
Serious health (metabolic) problems	<ul style="list-style-type: none"> • Diabetes • High blood pressure • Obesity • Chronic Renal Failure • High cholesterol • Sleep apnoea
Reduced blood flow	<ul style="list-style-type: none"> • Atherosclerosis (narrowing of the arteries) • Surgical damage to blood vessels
Interference by medication, alcohol and other drugs	<ul style="list-style-type: none"> • Cigarettes • Alcohol and drug abuse • Some drugs used to treat: <ul style="list-style-type: none"> > Blood pressure > Cholesterol > Depression > Psychiatric disorders > Prostate cancer
Interference with nerve function	<ul style="list-style-type: none"> • Parkinson's Disease • Alzheimer's Disease • Spinal cord trauma • Multiple Sclerosis • Diabetic neuropathy • Pelvic surgery (prostate, bowel)
Urological problems	<ul style="list-style-type: none"> • Peyronie's disease • Pelvic trauma

Feeling depressed and anxious about poor sexual performance can also lead to erectile problems. Psychological causes of erectile dysfunction can happen together with physical causes.

Is erectile dysfunction a part of getting old?

There is no doubt that the ageing penis has less responsive muscle cells, which interfere with good erections. 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 the experience when young, and usually the erection is not as firm.

Where can help be found?

When a man experiences erectile dysfunction he should see his local doctor, whether or not he wants to have sex. The reason for this is that erectile dysfunction may be a symptom of underlying medical conditions such as those listed in table 1. It is important to talk openly to a doctor about any problems with sexual functioning.

Diagnosis of erectile dysfunction does not need complicated tests. After taking a history of sexual function and general medical factors, the doctor will do a physical examination of the penis, testes and prostate. Blood tests are done to check glucose (sugar levels), cholesterol and testosterone levels.

How is erectile dysfunction treated?

Usually there will not be a specific treatment that will lead to the cure of erectile dysfunction. However, there are treatments that will allow erections to happen and can enable sexual activity to take place.

The main types of treatment for erectile dysfunction are:

Oral medications – there are tablets (Viagra®, Cialis® and Levitra®) that work in about 70 per cent of men with erectile dysfunction. These drugs, known as PDE5 inhibitors, inhibit a particular enzyme in the penis, enhancing the erectile response to normal sexual stimulation. Taking a tablet for erectile dysfunction is non-invasive and does not cramp the spontaneity of lovemaking.

Vacuum devices – a vacuum device is a pump placed over the penis to create blood flow. It draws blood into specific tissues of the penis, mimicking a normal erection.

Injections – there are medications which increase blood flow when they are injected into the penis. One of the side-effects is a painful erection lasting for hours, known as ‘priapism’.

Hormone therapy – hormone therapy is only suitable for men whose levels of sex hormones, such as testosterone, are too low. It is not a common cause of erectile problems.

Prescription drugs – in consultation with your doctor, changing your prescription drugs if they are the cause.

Penile prosthetic implants – penile prosthetic implants are usually used as a last resort if all other treatments have not worked.

It is usual to start with the least invasive treatment, such as tablets, and to recommend more complicated injection treatments or surgery if the tablets fail.

Can erectile dysfunction be prevented?

At the present time there are no proven ways to prevent erectile problems developing, however keeping general good health may help lower the chance of having these problems.

Regular exercise and a sensible diet will reduce the risk of obesity, diabetes, high blood pressure and high cholesterol, therefore making erectile dysfunction less likely. For some men, seeking treatment early can stop erectile problems from getting worse.

Does seeing a counsellor help?

Psychosocial problems are important and may cause erectile dysfunction in their own right, or together with one of the other causes listed above. Relationships are complicated and many factors cause tensions, which can affect sexual relations. In some men, problems can become ongoing and it can help to talk through the issue with a skilled counsellor. Improved sexual function may be delayed by failing to deal with the psychological side. Being open and honest with your partner will encourage a good understanding of the problem and couples can work together to bring about a positive result for their relationship.

For more information

For more detailed information, please call 1300 303 878 for Andrology Australia's free guide on erectile dysfunction, or visit www.andrologyaustralia.org

Impotence Australia

phone 1800 800 614 or visit www.impotenceaustralia.com.au

¹ Feldman HA, Goldstein I, Hatzichristou DG, Krane RJ, McKinley JB. *Impotence and its medical and psychosocial correlates: Results of the Massachusetts Male Ageing Study*. Journal of Urology 1994, 151:54-61

² Holden CA, McLachlan RI, Pitts M, Cumming R, Wittert G, Agius P, Handelsman DJ and de Kretser DM. *Men in Australia Telephone Survey (MATES): A national survey of the reproductive health and concerns of middle aged and older Australian men*. Lancet 2005; 366:218-24

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Date: September 2007

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Andrology Australia is an initiative funded by the Australian Government Department of Health and Ageing.

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