

# Erectile Dysfunction

## What is erectile dysfunction?

Erectile dysfunction (ED) is trouble having an erection or keeping it firm enough for sex. Another term for this problem is impotence.

Most men have trouble with erections from time to time. For example, it may be a problem when they are tired or nervous. When ED happens often or becomes a long-lasting problem, it can deeply affect the emotional lives of men and their sex partners. Couples need to be open and understanding with each other about sexual problems such as ED. Fortunately, there are many treatments that can help.

## What is the cause?

An erection happens when there is more blood flow into the penis and the veins in the penis clamp down, trapping the blood. This makes the penis stiff. Nerves in the penis give feelings of pleasure and help keep the erection until orgasm.

There are many possible causes of ED. They may be psychological or physical.

Some psychological causes are:

- Anxiety, stress, or feelings of guilt
- Depression
- Fear of failure during sex
- Loss of interest in sex

Physical causes may be:

- Being very tired or having jet lag
- Decreased blood flow to the penis
- Diabetes
- High cholesterol
- Smoking
- Being overweight
- Diseases or injuries of the nervous system, such as paralysis of the lower body or multiple sclerosis
- Alcohol or drug abuse
- Low levels of male hormone (testosterone)
- Cardiovascular disease, such as high blood pressure and coronary artery disease
- Side effects of medicines
- Problems after pelvic surgery for rectal or prostate cancer

ED affects older men more than younger men. The changes in blood flow that happen as men get older can make it harder to get and keep an erection.

## How is it diagnosed?

If you have ED for more than 2 months, or it is a recurring problem, you may want to see your healthcare provider for an exam. The exam may include:

- Urine and blood sugar tests to see if diabetes is causing the problem
- A blood test to measure the level of the male hormone testosterone, a male hormone, in your blood
- Blood tests to measure cholesterol and other fats in the blood and to check liver function
- A test of the blood flow and pressure in your penis

Nighttime stiffness of the penis can be tested with a snap gauge test called nocturnal penile tumescence (NPT). For this test, a band is placed around the penis before you go to sleep. If you have an erection, the snap gauge will break.

You may be referred to a doctor who specializes in erectile problems. If physical problems are ruled out as the cause of ED, you and your partner may be referred to a psychotherapist or family counselor. Most psychological problems causing ED can be helped. Therapy can often help in other areas of life as well as in sexual function. Therapy, like other treatments, can be uncomfortable but worthwhile. If you have concerns about your referral, discuss them with your healthcare provider.

## How is it treated?

If you have problems with blood flow or blood pressure to your penis, you may have several options. These treatments can help you have erections and increase your interest in being sexually active again.

### Drug Treatment

Medicines called PDE-5 inhibitors are often used to treat erectile dysfunction. These medicines include Viagra, Levitra, and Cialis. During sexual stimulation, these medicines work by relaxing the blood vessels in the penis. More blood can enter the penis, which helps you get or keep an erection.

Other prescribed drugs can be injected into the penis when you want to have an erection. A possible problem with these shots is priapism, which is a painful erection that lasts more than 4 hours. It requires emergency treatment. Because of this risk, the shots must be used only with a healthcare provider's prescription. The penis will usually become erect in 10 to 15 minutes after the shot. Erections resulting from these shots usually last as long as an hour.

If your level of testosterone is low, hormone treatment may be prescribed. The hormone testosterone is available in the form of patches or gels that are put on the skin, or as monthly or bimonthly shots that can be given in the arm.

Follow the directions that come with your medicine, including information about food or alcohol. Make sure you know how and when to take your medicine. Do not take more or less than you are supposed to take.

Many medicines have side effects. A side effect is a symptom or problem that is caused by the medicine. Ask your healthcare provider or pharmacist what side effects the medicine may cause and what you should do if you have side effects.

### **External Mechanical Devices**

Mechanical devices may be used to trap blood in the penis to cause an erection. They come with a vacuum chamber, a pump, connecting tubing, and elastic bands. The system requires time and dedication on the part of the couple to become comfortable with it. There are a number of such devices on the market. They may be covered by Medicare when the problem is related to blood flow and the device is prescribed by a healthcare provider.

To use the device, you insert the soft penis into the vacuum chamber tube, which is connected to a small hand pump. You then use the pump to apply suction. Suction pulls blood into the penis, and the penis gets erect. The blood is kept in the penis by a tight band, similar to a rubber band, placed around the base of the penis. You should not keep the band in place longer than 30 minutes or fall asleep with it.

### **Surgery**

Men who are not helped with the treatments described above may have severe defects of the penile arteries or veins. They may choose surgery to correct the defects.

Surgery may also be used to place a mechanical device or implant (prosthesis) inside the area where the blood normally collects to stiffen the penis. These devices are used only when other treatments don't help.

Your healthcare provider will discuss the pros and cons of different types of devices and help you select one that is likely to work best for you and your partner.

- Semi-rigid implants use rods to give firmness to the penis.
- Inflatable implants have cylinders that can be inflated or deflated at will.

Advantages of a semi-rigid implant are:

- It doesn't cost as much as an inflatable implant.
- It is simple to insert.
- It can be inserted under local, spinal, or general anesthesia.
- It is always ready for use once it is in place.
- It can be inserted during a 1-day surgery. You don't need to stay overnight at the hospital.

The main disadvantage of a semi-rigid implant is that it is always at its full size. It can be bent so it can be hidden and then brought into position when desired, but sometimes it may be hard to hide.

The main advantage of an inflatable implant is that it can be easily hidden. It uses a pump tucked in the scrotum above the testicles and a fluid reservoir behind the pubic bone. The hollow cylinders that replace the erectile tissues are

connected to the reservoir and can be inflated or deflated at will. The penis gets soft again when the fluid goes back to the reservoir.

Disadvantages of an inflatable implant are:

- It is more expensive.
- When it is inserted you have to stay at the hospital for 24 to 48 hours.
- Because it is more complex, there are more ways in which it could stop working.

Usually you can start using an implant 4 to 6 weeks after surgery. Risks of implant surgery include:

- Infection
- Part of the implant may come through the skin (usually with infection)
- Rejection of the implant by your body or damage to the inside of the penis

If any of this happens, the device has to be removed.

Penile implants do not change a man's sensation or ejaculation.

Although the overall success rate of surgical implants is very high, many healthcare providers urge couples to consider simpler, less expensive choices first.

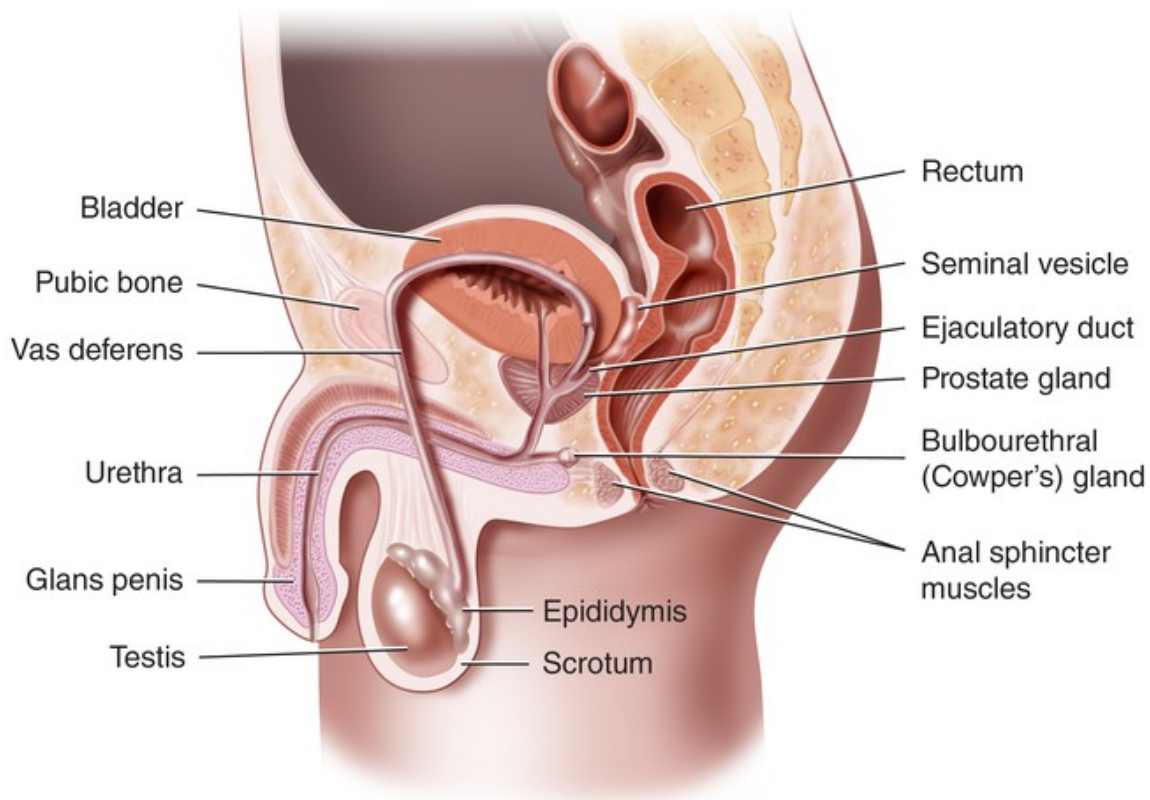
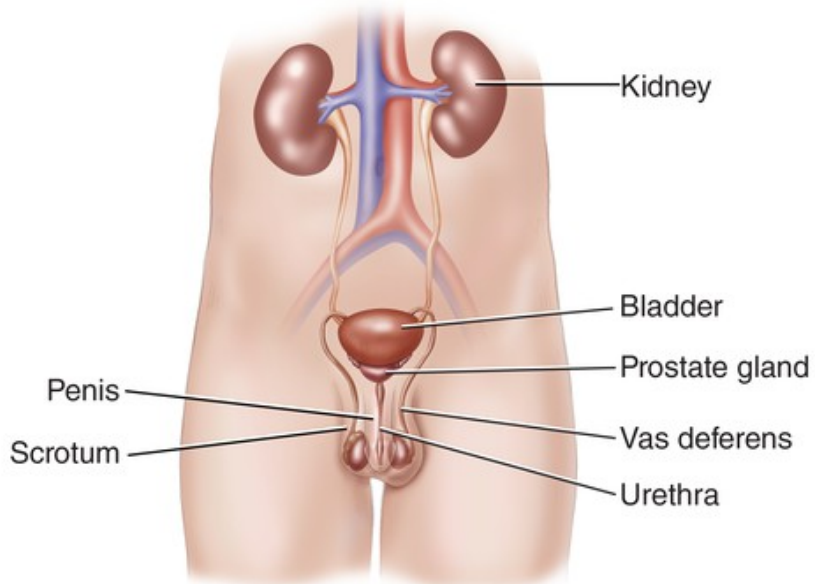
You can get more information from:

- American Urological Association  
1- 866-746-4282  
<http://www.urologyhealth.org>

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# Male Pelvis



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