



# Erectile Dysfunction

## WHAT IS ERECTILE DYSFUNCTION?

Erectile dysfunction (ED), or impotence, is the inability to consistently get or keep an erection (hard penis) long enough to have satisfactory sex. To maintain an erection, blood must be able to flow into and stay in the penis until orgasm.

Men often have problems with their erections once in a while. If ED occurs often, medical treatment may help.

ED can happen at any age, but is more common in men older than 65. Physical problems cause about 70 percent of cases; emotional issues cause about 10 to 20 percent; and 10 to 20 percent have a mixed physical and emotional cause.

## DID YOU KNOW?

The cause of erectile dysfunction (ED) is most often a physical problem, such as a disease or drug side effects.

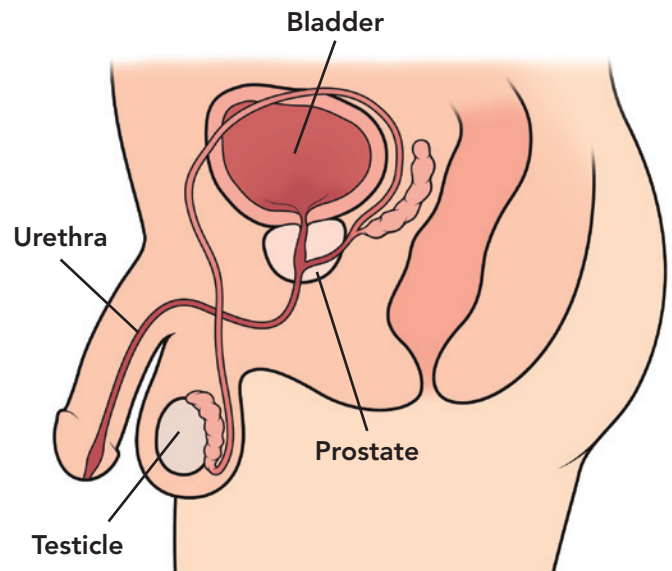
## WHAT CAUSES ERECTILE DYSFUNCTION?

The most common causes of ED are health problems that affect blood vessels and blood flow in the penis. These include hardening of the arteries (atherosclerosis), which is linked to diabetes, obesity, smoking, high blood pressure, and high cholesterol. Therefore, ED may be a sign of heart disease or other serious health problems.

Other common causes of ED include

- **Drugs.** Examples are medications (antidepressants and drugs to treat high blood pressure, pain, or prostate cancer), alcohol, tobacco, and illegal drugs.
- **Lack of sexual desire.** This can result from depression, anxiety, brain diseases such as stroke, and low testosterone (the male sex hormone).
- **Nerve damage.** Damage to the nerves that deliver signals from the brain to the penis can occur due to diabetes, multiple sclerosis (MS), spinal cord injuries, pelvic or prostate surgery, radiation therapy, or pelvic trauma.
- **Hormone imbalance.** Low testosterone, high prolactin, and abnormal thyroid hormone levels can cause ED.
- **Chronic kidney and liver disease.** These diseases affect blood vessels, nerves, and hormone levels.

Rare causes of ED include scarring and curving of the penis (Peyronie's disease).



## HOW DO DOCTORS FIND THE CAUSE OF ED?

If you have been having ED for more than two months, you should see a doctor to find the cause. To detect the cause of ED, your doctor will take a history of when you started to have problems with erections and sex drive, illnesses or injuries that could cause ED, and any recent physical or emotional changes in your life. You also will need to list all the medications you take. The evaluation most often includes a physical exam and a blood test to check testosterone levels.

Depending on the results, your doctor may also order blood tests for other hormones, fasting blood glucose (sugar), and cholesterol. Your doctor may also test for liver, kidney, and thyroid function. Rarely, some men need special tests to check nerve function, blood vessels, and blood flow.

## HOW IS ERECTILE DYSFUNCTION TREATED?

Treatment for ED will depend on the cause and how serious your condition is. Treatment options can include the following.

### Medicine

- **Oral medication.** Three effective drugs—sildenafil, vardenafil, and tadalafil—work by increasing blood flow to the penis during sexual stimulation.
- **Penile therapies.** Medications injected into the penis or inserted into the urethra to increase blood flow may work when oral medications do not.
- **Testosterone replacement therapy.** Testosterone can be replaced through injections, skin patches, gels, or tablets placed between the cheek and gums.
- **Combination medical therapy.** Some men do not respond well to one treatment alone. They may have a better response with oral medication plus penile and/or testosterone therapy.

### Devices and surgery

- **Vacuum device.** An external plastic cylinder and vacuum pump pulls blood into the penis and causes an erection. Sometimes, men need to place an elastic ring around the base of the penis to prevent blood from flowing back into the body.
- **Penile implants.** Penile implants (rigid or inflatable types) are used for the rare patient who does not respond well to other treatments.
- **Vascular surgery.** Young men who have a problem with penile blood flow sometimes may need surgery to correct the problem.

## Psychological counseling

- If a relationship or an emotional problem is the cause of your ED, your doctor may suggest that you and your partner see a sex therapist.

Dietary supplements are unproven treatments for ED, and some contain harmful ingredients.

All treatment options have risks. Finding the right treatment for you may take several tries. Your doctor will work with you to find the best treatment option for you. If the cause of your ED is a hormone imbalance, your doctor might refer you to an endocrinologist (an expert in hormone-related conditions).

## Questions to ask your doctor

- What is the cause or causes of my ED?
- What are my treatment options?
- What are the risks and benefits of each of these treatments?
- Should I see an endocrinologist?

## RESOURCES

- Find-an-Endocrinologist: [www.hormone.org](http://www.hormone.org) or call 1-800-HORMONE (1-800-467-6663)
- MedlinePlus (National Institutes of Health–NIH): [www.nlm.nih.gov/medlineplus/erectiledysfunction.html](http://www.nlm.nih.gov/medlineplus/erectiledysfunction.html)
- National Kidney and Urologic Diseases Information Clearinghouse (NIH): [kidney.niddk.nih.gov/KUDiseases/pubs/ED/index.aspx](http://kidney.niddk.nih.gov/KUDiseases/pubs/ED/index.aspx)
- American Urological Association Foundation: [www.urologyhealth.org](http://www.urologyhealth.org)

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The Hormone Health Network offers free, online resources based on the most advanced clinical and scientific knowledge from The Endocrine Society ([www.endo-society.org](http://www.endo-society.org)). The Network's goal is to move patients from educated to engaged, from informed to active partners in their health care. This fact sheet is also available in Spanish at [www.hormone.org/Spanish](http://www.hormone.org/Spanish).

Erectile Dysfunction Fact Sheet



[www.hormone.org](http://www.hormone.org)