

# Erectile Dysfunction



CAUSES, RISKS  
& TALKING TO  
YOUR DOCTOR

*This brochure, the first in a three-part series, focuses on erectile dysfunction, or ED. You may still hear it called “impotence,” but today doctors usually will refer to it as ED, a more precise term because it refers to only erection problems. In this brochure, you will learn about the background on the condition, its causes and risks.*

There are several different sexual problems a man may face:

- low libido, having little or no sex drive or interest in sex
- ejaculatory difficulties, which can include premature ejaculation (reaching orgasm too soon) or delayed ejaculation (taking an extremely long time to reach an orgasm); and
- erectile dysfunction (ED), the persistent inability to get or maintain an erection firm enough for satisfactory sexual intercourse.

These conditions can overlap—one man may have more than one condition at the same time. The good news is that solutions are available for all of these problems to help a man and his partner enjoy a satisfying sexual relationship throughout life.

# ERECTILE dysfunction

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Until relatively recently, a man who had trouble getting or keeping an erection was likely to suffer in silence. He may have thought of the problem as a personal failure or an unavoidable part of the aging process. He may have been too embarrassed to bring up the subject with his doctor, or just have assumed that there was no good solution, so the condition went untreated.

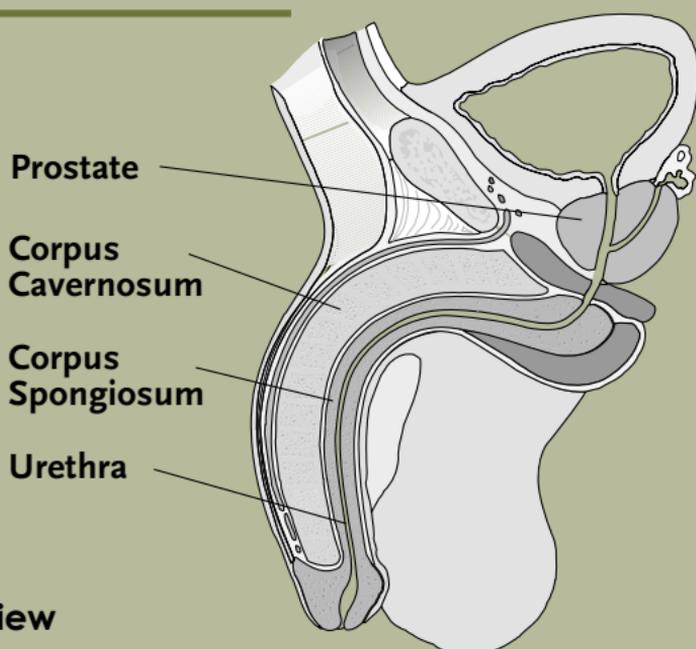
Several developments have changed that situation. Today we have not only a greater understanding of male sexual health, but also a broader array of treatment options to help a man achieve and maintain satisfying erections. And media attention on some of the treatment options has made it easier for a man to take the first step in resolving ED: discussing it with his partner and doctor.

## WHAT IS ED?

Men who have ED have a problem getting or keeping an erection that's firm enough for sexual intercourse. All men have difficulties with erections from time to time. In some men it is infrequent or mild. In others it is a consistent, more severe problem. It can cause low self-esteem, performance anxiety, depression, stress and may affect the quality of a marriage or intimate relationship.

If you know or suspect you have ED, you are not alone. Studies show that about one half of American men over age 50 (or 30 million men in that age group) have some degree of ED. In seeking help for ED, it is also important to remember that an erection problem affects both partners in a relationship.

FIGURE A: PENIS ANATOMY



Side View

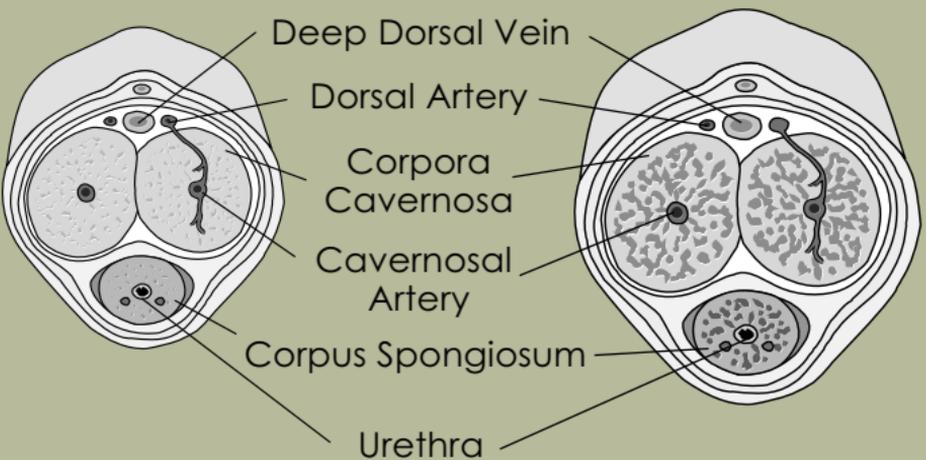
# ERECTILE dysfunction

## HOW ERECTIONS OCCUR

When a man is not sexually aroused, the penis is flaccid or limp. During sexual arousal, nerve messages begin to release chemicals that increase blood flow into the penis. The blood flows into two spongy chambers (the corpora cavernosa, Figures B and C) inside the penis. The “smooth muscle” in the chambers relaxes, which allows blood to enter and remain in the chambers. The pressure of the blood in the corpora cavernosa (Figure C) makes the penis firm, producing an erection. After a man climaxes, or has an orgasm, the blood flows out again and the erection quickly subsides.

FIGURE B: FLACCID PENIS

FIGURE C: ERECT PENIS



**Cross Section**

## THESE MYTHS CAN BE HAZARDOUS TO YOUR SEXUAL HEALTH

For too long, the subject of ED has been clouded by myths and misinformation. It is important to recognize these beliefs as the harmful myths they are.

**Myth #1:** ED is an inevitable part of aging.

**Fact:** It's true that ED becomes more common as men age. But growing old is not the cause of the problem. In fact, many men enjoy sexual activity well into their senior years. Sexual function does decrease with age, even in healthy men. This is the result of age-related changes in testosterone levels and in the tissues that are involved in developing an erection. More importantly, however, as men age they are more likely to have other health problems, such as heart disease or diabetes mellitus, that increase the risk of ED. Still, slowing down is not the same as stopping. ED is a treatable condition, not a “death sentence” to your sex life.

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**Myth #2:** ED is all in your mind.

**Fact:** At one time, doctors thought that psychological problems, such as stress and anxiety, were the main causes of ED. But recent studies show that most cases (about 75 percent) have a physical cause.

**Myth #3:** ED is nothing to worry about.

**Fact:** An erection problem is something to be concerned about. ED can have a negative impact on a man's self-esteem, quality of life and relationship with his partner. Also, ED can be an early warning sign of a more serious illness, such as heart disease, high blood pressure or diabetes mellitus. Diagnosing and treating the condition that causes ED can improve your overall well-being, as well as help restore your sexual health.

**Myth #4:** Not much can be done for ED, so you just have to live with it.

**Fact:** Most cases of ED can be treated easily; every case should be evaluated.

## WHAT CAUSES ED?

There are many possible causes of ED. It can result from physical or psychological factors or a combination of factors.

### PHYSICAL CAUSES

Generally, the various physical causes of ED can be grouped into three basic problems:

1) Not enough blood flows into the penis.

Many conditions can reduce blood flow into the penis, causing ED. The most common problem is atherosclerosis or hardening of the arteries.

Diabetes mellitus, high blood pressure, high cholesterol and cigarette smoking also can cause atherosclerosis—and therefore ED.

2) The penis cannot store blood during an erection.

A man with this problem, called venous leak, typically cannot maintain an erection because blood does not remain trapped in the penis. This condition may occur at any age.

3) Nerve messages from the brain or spinal cord do not reach the penis.

Diabetes mellitus, multiple sclerosis, Parkinson's disease and spinal cord injuries may cause these problems. Injuries or surgery to the pelvic area also can damage the penile nerves.

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## PSYCHOLOGICAL CAUSES

Sexual activity requires the mind and body to work together. Consequently, many emotional or relationship problems can cause or worsen ED.

These include:

- depression
- marital or relationship conflicts
- stress at home or work
- anxiety about sexual performance

## MEDICINAL CAUSES

A very long list of prescription and over-the-counter medications, as well as recreational drugs, cause erectile difficulties as a side effect. Common culprits include many medications to treat high blood pressure, even medication to dry up a runny nose. Illicit drugs, such as marijuana, cocaine and heroin, also are well-known causes of ED.

Alcohol falls into the category of drugs that can cause sexual problems, as well. As William Shakespeare noted in *Macbeth*, drinking “provokes the desire, but it takes away the performance.”

# KNOW YOUR RISK FACTORS

This checklist can help you identify common risk factors for ED. Check the habits or conditions that apply to you:

- diabetes
- cigarette smoking
- high blood pressure
- stress, depression or anxiety
- high cholesterol levels
- heavy alcohol consumption
- heart or blood vessel disease (atherosclerosis)
- illicit drug use (cocaine, marijuana or heroin)
- accidents or surgery to the genitals or groin
- obesity
- chronic renal failure
- surgery or radiation for prostate or rectal cancer

# ERECTILE dysfunction

## GETTING MEDICAL HELP

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Newer, easy-to-administer medications for ED mean that primary care doctors, such as internists or family practice physicians, now routinely treat the condition. In some cases, your primary care doctor may refer you to a **urologist** who specializes in the treatment of ED, or a specialist to treat a disease or condition that may be an underlying cause of ED.

You may be sent to see a urologist if you don't respond to drug therapy, if your ED is complicated or if your primary care doctor decides you need a second opinion. Urologists, in addition to performing specialized evaluations, prescribe medications and perform surgery to correct erection problems.

If your ED is due to a hormonal problem, such as a low testosterone level or is related to diabetes, you may be referred to an endocrinologist.

Your doctor may also refer you to a psychologist, psychiatrist, sex therapist, social worker or similar counselor. These specialists treat psychological or emotional causes of ED such as depression, anxiety and relationship problems. Even if your ED is not caused by these factors, it may contribute to them. It may be helpful to get counseling, alone or with your partner, in addition to getting medical therapy for ED.

## WHAT HAPPENS AT THE DOCTOR'S OFFICE?

ED has many different causes, a careful diagnostic work-up is important to find the underlying problem and determine the best treatment options.

### MEDICAL HISTORY

Your doctor will ask you a series of questions about your ED and if you have other conditions that might contribute to it, such as an endocrine problem or depression. You may be asked to complete a questionnaire to assess your problem. Some questions about your sexual history and performance may seem very personal. Answer honestly, and don't be embarrassed. This information is important in determining the best treatment for you.

Your doctor is likely to ask about:

- your current sexual functioning
- when you started noticing changes
- any past medical or sexual problems
- surgery or injuries to the pelvic area
- current and past medications (prescriptions, over-the-counter dietary supplements, etc.)
- your lifestyle and personal habits (alcohol consumption, smoking, stress, use of illicit drugs, etc.)
- your relationship with your current and past partners

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## THE PHYSICAL EXAM

A careful physical exam is also important. Your doctor will check your overall health and physical condition, looking closely for signs of problems with your circulatory, nervous and endocrine (hormonal) systems. A thorough physical includes examination of your blood pressure, penis and testicles. The doctor may also perform a rectal exam to check the prostate gland. These exams are not painful and may provide important information about the cause of your ED.

## TESTING FOR ED

After the history and physical, your doctor may order some tests for further analysis. For many men, a blood test is recommended to check for:

- low levels of testosterone
- elevated levels of blood glucose (sugar), a sign of diabetes
- elevated levels of blood cholesterol and other lipids (fatty substances)
- abnormal function of the thyroid gland

Depending on the suspected cause of your ED, additional tests (including a urinalysis to check for sugar, which may be the first sign of diabetes—a risk factor for ED) can determine if you have problems with the nerve or blood supply to the penis. Your primary care doctor may refer you to a specialist, usually a urologist, for further, more sophisticated testing.

## TALKING TO YOUR DOCTOR ABOUT ED

Sex is a sensitive subject for most people and it's understandable to feel somewhat reluctant to discuss it with your doctor. Here are some suggestions to help begin the communication process:

**TIP 1:** When you call to make an appointment, if you're not comfortable telling the receptionist that you are calling about a sexual problem, simply say you'd like to make an appointment for men's health.

**TIP 2:** When you talk to your doctor, be as clear and to the point as you can. Make sure the doctor understands exactly what you mean to say. For example, you might say:

*"Doctor, could the high blood pressure (or other) pills I've been taking be interfering with my sexual function? I'm not performing the way I'm used to."*

*"I've been having some difficulty getting an erection since I started my new job last month. I'd like to find out what the problem might be."*

**TIP 3:** If you sense that your doctor does not seem comfortable or interested in discussing ED, ask for a referral to a urologist.

## IMPORTANT INFORMATION FOR PARTNERS

When a man has ED, his partner is almost always affected, too. Experts agree that ED is a couple's problem—one that can best be solved by both partners working together. If your partner has ED, here are some ways you can help:

**TALK IT OVER.** Good communication is the foundation for an enduring relationship. Reassure your partner that he is not alone. Remind him that ED is a common medical disorder that is very treatable today.

**LEARN AS MUCH AS YOU CAN** about the condition and the treatment options. The best treatment for ED is one that you both agree will fit comfortably and naturally into your life.

**OFFER TO GO WITH HIM** to his doctor's appointment.

**WORK TOGETHER.** Generally, couples who work together have the best chance of successful treatment.

## GLOSSARY

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**arteries:** blood vessels that carry blood from the heart to various parts of the body.

**atherosclerosis:** a process of progressive thickening and hardening of the walls of arteries as a result of fat deposits in their inner lining.

**cholesterol:** a fat-like substance important to certain body functions but which, in excessive amounts, contributes to unhealthy fatty deposits in the arteries that may interfere with blood flow.

**corpora cavernosa:** two cylinder-shaped bodies that lie side by side in the penis and that, when filled with blood, enlarge to cause the penis to swell and become erect.

**corpus spongiosum:** a column of erectile tissue in the center of the penis and surrounding the urethra; when filled with blood it enlarges and causes the penis to swell and become erect.

**diabetes mellitus:** a condition characterized by high blood sugar resulting from the body's inability to use sugar (glucose) as it should; in Type 1 diabetes, the pancreas is not able to make enough insulin; in Type 2 diabetes, the body is resistant to using available insulin.

**ejaculation:** release of semen from the penis during sexual climax.

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**erectile dysfunction (ED):** the inability to get or maintain an erection for satisfactory sexual intercourse.

**erection:** enlargement and hardening of the penis caused by increased blood flow into the penis and decreased blood flow out of it as a result of sexual excitement.

**glucose:** a simple sugar produced in animals by the conversion of carbohydrates, proteins and fats.

**high blood pressure:** medical term is hypertension.

**impotence:** the precise term erectile dysfunction (ED) has largely replaced the word “impotence” because it refers only to erection problems.

**libido:** sexual desire.

**lipids:** group of organic compounds consisting of fats, oils, and related substances that, along with proteins and carbohydrates, are the structural components of living cells.

**multiple sclerosis:** a serious progressive disease of the central nervous system.

**orgasm:** the climax of sexual excitement, consisting of intense muscle tightening around the genital area experienced as a pleasurable wave of tingling sensations through parts of the body.

**Parkinson's disease:** progressive neurological condition affecting movement such as walking, talking and writing.

**penis:** the male organ used for urination and sex.

**premature ejaculation:** the inability to maintain an erection long enough for mutual satisfaction.

**prostate:** in men, a walnut-shaped gland that surrounds the urethra at the neck of the bladder; the prostate supplies fluid that goes into semen.

**rectal:** having to do with the rectum, the lower part of the large intestine that ends in the anal opening.

**renal failure:** loss of the kidney's ability to excrete wastes, produce urine and conserve electrolytes.

**testicles:** also known as testis; either of the paired, egg-shaped glands contained in a pouch (scrotum) below the penis; they produce sperm and the male hormone testosterone.

**testosterone:** male hormone responsible for sexual desire and for regulating a number of body functions.

**thyroid:** an endocrine gland located in the neck that secretes the hormones responsible for controlling metabolism and growth.

**urologist:** a doctor who specializes in diseases of the male and female urinary systems and the male reproductive system.

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NOTES

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The American Urological Association Foundation, Inc. (formerly the American Foundation for Urologic Disease, Inc.) is a charitable organization established to raise funds for research, lay education and patient advocacy for the prevention, detection, management and cure of urologic diseases.

The American Urological Association Foundation provides this information based on current medical and scientific knowledge. This information is not a tool for self-diagnosis or a substitute for professional medical advice. It is not to be used or relied on for that purpose. Please see your urologist or other health care provider regarding any health concerns and always consult a health care professional before you start or stop any treatments, including medications.

To obtain multiple copies of this brochure or others in our patient information library, please call 410-689-3990.

Single copies of these booklets are available free of charge by calling or writing:

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