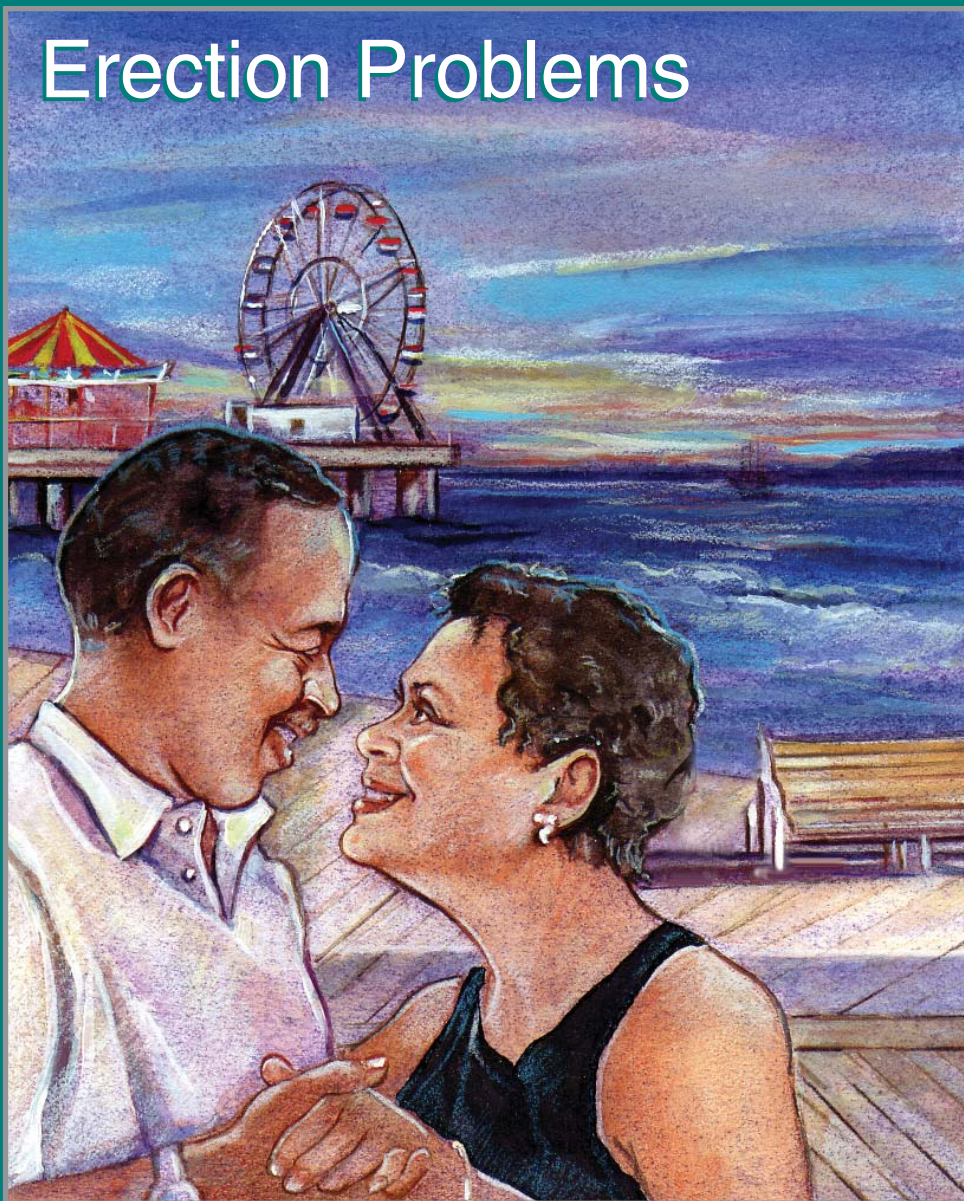


What I need to know about Erection Problems



U.S. Department
of Health and
Human Services

NATIONAL INSTITUTES OF HEALTH

NIDDK NATIONAL INSTITUTE OF
DIABETES AND DIGESTIVE
AND KIDNEY DISEASES

National Kidney and Urologic Diseases
Information Clearinghouse

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What are erection problems?

Erection* problems can be a difficult topic to discuss, but if you have problems getting or keeping an erection, you have good reasons to talk with a doctor: Erection problems not only interfere with your sex life, they can be a sign of other health problems.

Erection problems can be a sign of blocked blood vessels or nerve damage from diabetes. If you don't see your doctor, these problems will go untreated and can harm your body.



ED is a medical problem. Your doctor can help.

*See page 15 for tips on how to say the words in **bold** type.

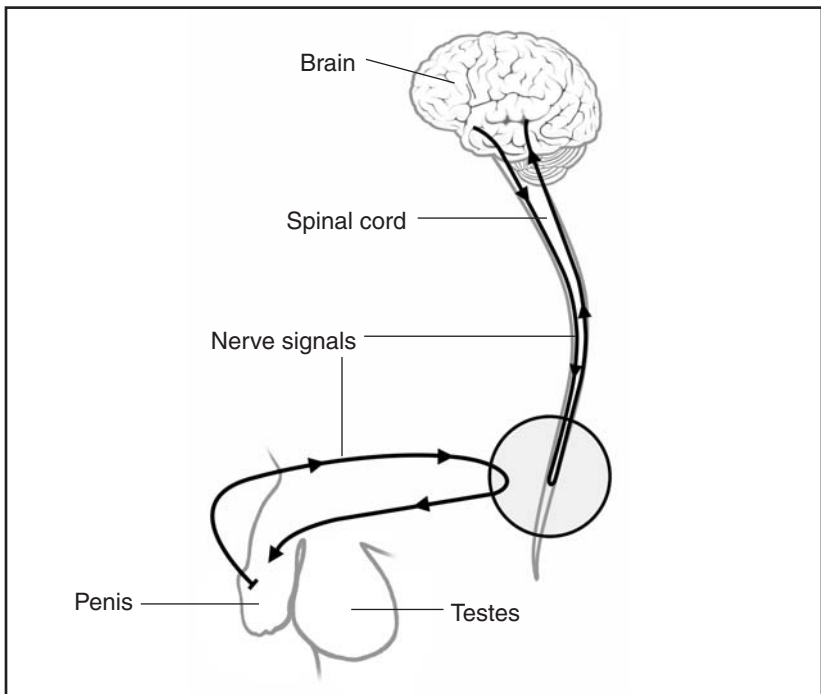
Erection problems used to be called **impotence**. Now the term **erectile dysfunction** is more common. Sometimes people just use the initials ED.

Your doctor can offer several ED treatments. For many men, the answer is as simple as taking a pill. Other men have to try two or three options before they find a treatment that works for them. Don't give up if the first treatment doesn't work. Finding the right treatment can take time.



What causes an erection?

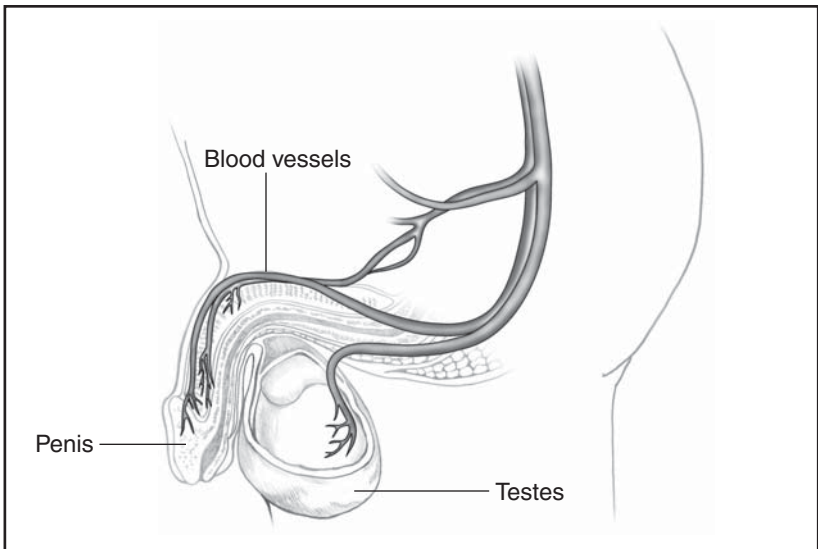
Hormones, blood vessels, nerves, and muscles must all work together to cause an erection. Your brain starts an erection by sending nerve signals to the **penis** when it senses sexual stimulation. Touch may cause this arousal. Other triggers may be things you see or hear, or sexual thoughts or dreams.



Your brain starts an erection by sending nerve signals to the penis.

The nerve signals cause the muscles in the penis to relax and let blood flow into the spongy tissue in the penis. Blood collects in this tissue like water filling a sponge. The penis becomes larger and firmer, like an inflated balloon. The veins then get shut off to keep blood from flowing out.

After climax or after the sexual arousal has passed, the veins open back up and blood flows back into the body.



Healthy blood vessels are needed for an erection.

What causes erectile dysfunction?

Many different conditions can lead to ED. Many of the causes are health problems that affect the heart and blood vessels and need to be treated to help prevent more serious problems.

- high blood pressure
- high cholesterol
- diabetes

Unhealthy lifestyle habits can also contribute to ED. Anything that's bad for your heart is also bad for your sexual health.

- alcohol and drug abuse
- smoking
- overeating
- lack of exercise

Nerve damage from many causes can interfere with the signals that start an erection.

- spinal cord injury
- treatments for **prostate** cancer, including **radiation** and prostate removal
- multiple sclerosis and other nerve diseases

Some prescription drugs such as some antidepressants or high blood pressure medicines can cause ED. Your doctor may be able to change your drug treatment. Never stop taking a prescribed drug without talking with your doctor.

A small number of ED cases result from a reduced level of the male hormone **testosterone**.

Doctors used to believe that most cases of ED resulted from mental or emotional problems. We now know that most ED has a physical cause. But depression and worry or anxiety can still cause ED. And ED from physical causes can lead to depression and worry, making ED worse.

A person should not assume ED is part of the normal process of aging. Another cause most likely exists.

What will happen in the doctor's office?

Talking about ED can be difficult. When you meet with your doctor, you might use a phrase like “I’ve been having problems in the bedroom” or “I’ve been having erection problems.” Remember that a healthy sex life is part of a healthy life. Don’t feel embarrassed about seeking help. ED is a medical problem, and your doctor treats medical problems every day.

If talking with your doctor doesn't put you at ease, ask for a referral to another doctor. Your doctor may send you to a **urologist**—a doctor who specializes in sexual and urologic problems.

Your partner may want to come with you to see the doctor. Many doctors say ED is easier to treat when both partners are involved.

To find the cause of your ED, your doctor will take a complete medical history and do a physical exam.

Medical History

Your doctor will ask general questions about your health, as well as specific questions about your erection problems and your relationship with your partner. Bring a list of all the medicines you take, or bring them with you to show to your doctor. Tell your doctor about any surgery you have had.

Your doctor will ask about habits like alcohol use, smoking, and exercise.

Your doctor might ask you questions like

- How do you rate your confidence that you can get and keep an erection?
- When you have erections with sexual stimulation, how often are your erections hard enough for penetration?

- During sexual intercourse, how often are you able to maintain your erection after penetration?
- When you attempt sexual intercourse, how often is it satisfactory for you?
- How would you rate your level of sexual desire?
- How often are you able to reach climax and **ejaculate**?
- Do you have an erection when you wake up in the morning?

The answers to these questions will help your doctor understand the problem.

Physical Exam

A physical exam can help your doctor find the cause of your ED. As part of the exam, the doctor will examine your testes and penis, take your blood pressure, and check your reflexes. A blood sample will be taken to test for diabetes, cholesterol level, and other conditions that may be associated with ED.

How is erectile dysfunction treated?

Your doctor can offer a number of treatments for ED. You may want to talk with your partner about which treatment fits you best as a couple. Most people want the simplest treatment possible. You may need to try a number of treatments before you find the one that works best for you.

Lifestyle Changes

For some men, getting more exercise, quitting smoking, losing weight, and cutting back on alcohol may solve erection problems.

Counseling

Even though most cases of ED have a physical cause, counseling can help couples deal with the emotional effects. Some couples find that counseling adds to the medical treatment by making their relationship stronger.

Oral Medicines

Since 1998, doctors have been able to prescribe a pill to treat ED. Current brands include Viagra, Levitra, and Cialis. If your health is generally good, your doctor may prescribe one of these drugs. You should not take any of these pills to treat ED if you take any nitrates, a type of heart medicine. All ED pills work by increasing blood flow to the penis. They do not cause automatic erections. Talk with your doctor about when to take the pill. You may need to experiment to find out how soon the pill takes effect.

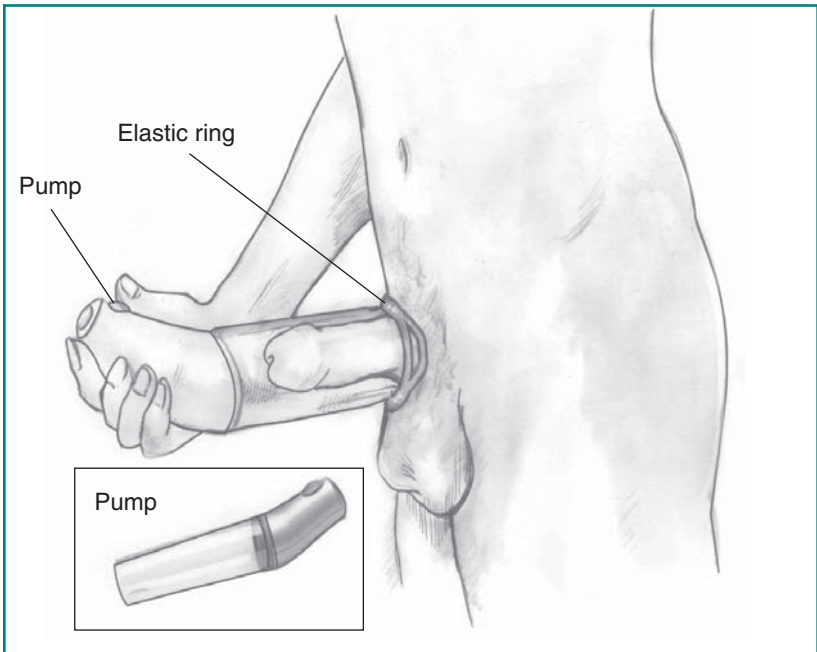
Even if taking a pill solves your erection problem, you should still take care of the other health issues that may have caused your ED.

Injections

Taking a pill doesn't work for everybody. Many men use medicines that go directly into the penis. Caverject and Edex are injected into the shaft of the penis with a needle. MUSE is a tiny pill inserted into the **urethra** at the tip of the penis. These medicines usually cause an erection within minutes. These medicines can be very successful, even if other treatments fail.

Vacuum Device

Another way to create an erection is to use a specially designed vacuum tube. The penis is inserted into the tube, which is connected to a pump. As air is pumped out of the tube, blood flows into the penis and makes it larger. A specially designed elastic ring is moved from the end of the tube to the base of the penis to keep the blood from flowing out.

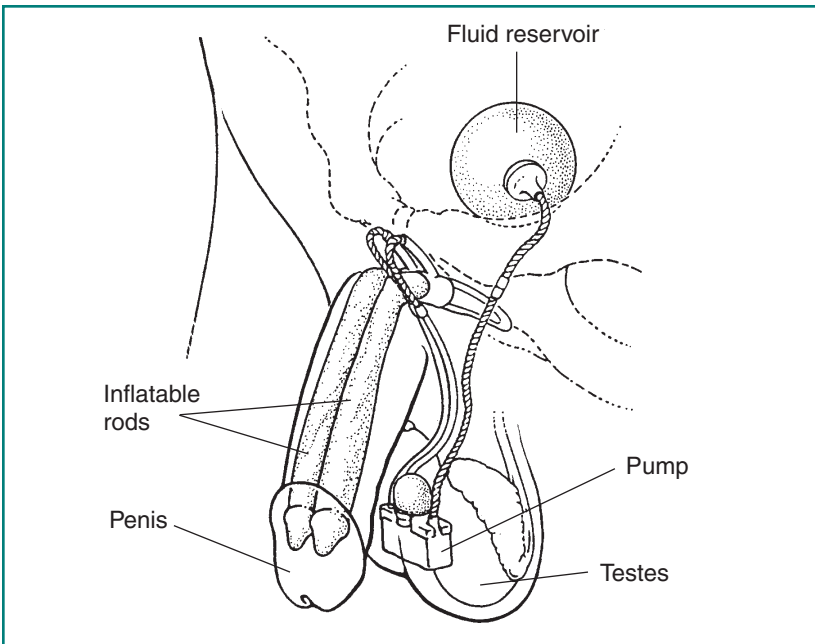


When air is pumped out of the tube, blood flows into the penis and causes an erection.

Penile Implant

If the other options fail, some men need surgery to treat ED. A surgeon can implant a device that inflates or unbends to create an erection. Implanted devices do not interfere with the way sex feels.

Penile implant operations cannot be reversed. Once a man has a penile implant, he must use the device to have an erection. Talk with your doctor about the pros and cons of having a penile implant.



A pump implanted under the skin fills two rods with fluid to cause an erection.

Points to Remember

- Erection problems may be a sign of health problems.
- A doctor can help you overcome erection problems.
- Smoking, being overweight, drinking too much alcohol, and avoiding exercise can contribute to erection problems.
- Most cases of erectile dysfunction (ED) have a physical cause, but counseling can help couples build a stronger relationship.
- Many men can take a pill to treat ED. These men should still treat the health conditions that caused ED.
- Taking a pill doesn't work for all men.
- Men who take medicines called nitrates should not take a pill to treat ED.
- Additional treatment options for ED include injections, urethral inserts, a vacuum device, and a surgical implant.



Hope through Research

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) sponsors programs aimed at understanding the causes of ED and finding treatments to reverse its effects. The NIDDK's Division of Kidney, Urologic, and Hematologic Diseases (KUH) supported the researchers whose work helped develop the first pill to treat ED. The KUH continues to support basic research into how erections happen and the diseases that can cause ED, including diabetes and high blood pressure.

Participants in clinical trials can play a more active role in their own health care, gain access to new research treatments before they are widely available, and help others by contributing to medical research. For information about current studies, visit www.ClinicalTrials.gov.

Pronunciation Guide

ejaculate (ee-JAK-yoo-layt)

erectile dysfunction (ee-REK-tyl)
(diss-FUHNK-shuhn)

erection (ee-REK-shuhn)

impotence (IM-puh-tenss)

penis (PEE-niss)

prostate (PROSS-tayt)

radiation (RAY-dee-AY-shuhn)

testosterone (tess-TOSS-tuh-rohn)

urethra (yoo-REE-thruh)

urologist (yoo-ROL-uh-jist)

For More Information

American Urological Association

1000 Corporate Boulevard

Linthicum, MD 21090

Phone: 1-866-RING-AUA (1-866-746-4282)
or 410-689-3700

Email: aua@auanet.org

Internet: www.auanet.org
www.UrologyHealth.org

American Diabetes Association

National Office

1701 North Beauregard Street

Alexandria, VA 22311

Phone: 1-800-DIABETES (1-800-342-2383)

Fax: 703-549-6995

Email: AskADA@diabetes.org

Internet: www.diabetes.org

American Association of Sexuality Educators, Counselors, and Therapists

P.O. Box 1960

Ashland, VA 23005-1960

Phone: 804-752-0026

Fax: 804-752-0056

Email: aasect@aasect.org

Internet: www.aasect.org

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Tom Lue, M.D.

University of California at San Francisco

Kevin McVary, M.D.

Northwestern University

Hunter Wessells, M.D.

University of Washington

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National Kidney and Urologic Diseases Information Clearinghouse

3 Information Way
Bethesda, MD 20892-3580
Phone: 1-800-891-5390
TTY: 1-866-569-1162
Fax: 703-738-4929
Email: nkudic@info.niddk.nih.gov
Internet: www.kidney.niddk.nih.gov

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This booklet is also available at www.kidney.niddk.nih.gov.

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