

Preventing Deep Vein Thrombosis

Frequently Asked Questions

Overview

What is deep vein thrombosis (DVT)?

Deep vein thrombosis is a condition in which blood clots (or thrombi) form in deep veins in the legs or other areas of the body. Veins are the blood vessels that carry blood from the body's tissues to the heart. Deep veins are located deep in the body, away from the skin's surface.

How does a clot form in a vein?

Clotting is a normal process that helps stop bleeding, such as from a cut in the skin. A clot can also form if

- blood flow is too slow
- the lining of a vein is damaged
- a problem in the blood makes it clot more easily

When a clot forms in a deep vein, blood flow in the vein slows down and causes the vein to swell.

If a piece of a clot breaks free and moves through the blood vessels to the lungs, it is very serious. This condition, called pulmonary embolism (PE), can be fatal. Nearly 1 in 3

people who have DVT develop PE. It's important to find and treat DVT early in order to prevent PE.

Risk Factors and Prevention

Who is at risk of DVT?

DVT can occur in anyone, but some factors can increase the risk. Having more than one risk factor further increases the risk. Events or conditions that increase the risk of DVT include the following:

- Pregnancy and the 4 to 6 weeks after giving birth
- Surgery
- Trauma
- Long periods of not moving (bed rest, sitting, long car or airplane trips)
- Cancer and cancer therapy
- Past history of DVT
- Increasing age
- Use of birth control methods that contain [estrogen](#) or [hormone therapy](#) for [menopause](#) symptoms
- Certain illnesses, including heart failure, [inflammatory bowel disease \(IBD\)](#), and some kidney disorders
- Obesity
- Smoking
- Varicose veins
- Having a tube in a main vein (sometimes needed to give medications over a period of time)
- Having a [thrombophilia](#), one of several diseases in which the blood does not clot correctly

What can be done before and after surgery to prevent DVT?

Your doctor may prescribe medications to prevent blood clots from forming before or after surgery. You may also be told to stop taking certain medications before surgery.

At the hospital, you may wear special elastic stockings or inflatable boots. These devices squeeze the muscles to help keep blood flowing. You may need to wear them until you leave the hospital. Your feet or the foot of your bed may be raised.

You may also be urged to get up and walk around soon after the procedure.

How can DVT be prevented during pregnancy?

If you're pregnant, medication or other treatments may be prescribed to prevent DVT if you have certain risk factors:

- Strong family history of DVT
- An inherited thrombophilia
- Need for bed rest
- Likely to have a [cesarean birth](#)

If medication is prescribed for you, your health care professional should make sure you know how to take the medication and what to avoid while taking it.

How can DVT be prevented during travel?

When planning a long trip, the following preventive steps are recommended, especially if you are pregnant or have other risk factors for DVT:

- Drink lots of fluids.
- Wear loose-fitting clothing.
- Walk and stretch at regular intervals (for example, when traveling by car, make frequent stops to get out and stretch your legs).

Special stockings that compress the legs below the knee may help prevent blood clots from forming. Talk with your health care professional before you try these stockings, because some people should not wear them (such as those with [diabetes mellitus](#) or problems with blood circulation).

Symptoms, Diagnosis, and Treatment

What are signs of DVT?

Only about one half of people who have DVT show any signs or have symptoms. Signs and symptoms of DVT in the ankle, calf, or thigh include the following:

- Warmth or tenderness
- Pain or sudden swelling
- Redness of the skin
- Constant pain in one leg while standing or walking

What are signs of pulmonary embolism (PE)?

PE can be life-threatening. If you have any of the following signs or symptoms, contact your health care professional or go to the emergency room:

- A sudden cough, which may produce blood
- Sudden shortness of breath
- Pain in the ribs when breathing
- Sharp chest pain under the breast or on one side
- Burning, aching, or dull heavy feeling in the chest
- Rapid breathing
- Rapid heart rate

How is DVT diagnosed?

DVT can be hard to diagnose. The following tests can help your health care professional tell if you have DVT or if you are at increased risk:

- **Blood tests**—You may be tested for blood disorders that are known to increase the risk of DVT.
- **Doppler ultrasound exam** —A handheld device is placed over veins that uses sound waves to check blood flow. Pressure is applied to see if the vein responds normally. This test is most often used to confirm DVT in the legs.

- **Magnetic resonance imaging (MRI)** –MRI, a special type of imaging test, can show clots in the legs or pelvis.
- **Venogram**—In this test, dye is put into a vein, and an X-ray is taken. The dye can show whether there is a clot in the vein.

Other tests may be done if the clot is thought to be in the lungs:

- **Spiral computed tomography (CT)** –This imaging test is done to see if any clots have moved to the lungs.
- **Ventilation/perfusion (V/Q) scan**—This imaging test measures how well air and blood move through the lungs. It is used to diagnose PE.

How is DVT treated?

DVT is most often treated with medications. Medications may include anticoagulants to prevent clots or, less commonly, thrombolytics to dissolve them.

Glossary

Cesarean Birth: Birth of a fetus from the uterus through an incision (cut) made in the woman's abdomen.

Computed Tomography (CT): A type of X-ray that shows internal organs and structures in cross section.

Diabetes Mellitus: A condition in which the levels of sugar in the blood are too high.

Doppler Ultrasound Exam: A type of ultrasound in which sound waves can tell how fast an object is moving. Doppler ultrasound can be used to find the heartbeat of a fetus or how fast blood is moving through a vein or artery.

Estrogen: A female hormone produced in the ovaries.

Hormone Therapy: Treatment in which estrogen and often progestin are taken to help relieve symptoms that may happen around the time of menopause.

Inflammatory Bowel Disease (IBD): The name for a group of diseases that cause inflammation of the intestines. Examples include Crohn's disease and ulcerative colitis.

Magnetic Resonance Imaging (MRI): A test to view internal organs and structures by using a strong magnetic field and sound waves.

Menopause: The time when a woman's menstrual periods stop permanently. Menopause is confirmed after 1 year of no periods.

Thrombophilia: A condition in which the blood does not clot correctly.

If you have further questions, contact your ob-gyn.

Don't have an ob-gyn? [Learn how to find a doctor near you.](#)

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