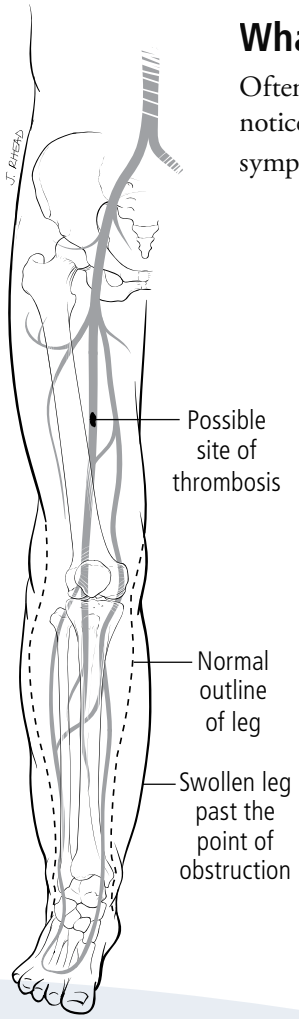
Deep Vein Thrombosis and Embolism

What is it?

Deep vein thrombosis (also called DVT) is a blood clot (or thrombus) in the deep tissues of the body. Most DVTs develop in the veins of the leg.

DVTs are dangerous. They can damage the valves in your veins, leading to chronic pain and swelling. They can also break loose and travel in your veins.

A blood clot that has broken loose is called an **embolism.** If it has travelled to the lungs, it's called a **pulmonary embolism.** A pulmonary embolism can be life threatening.



What are the symptoms?

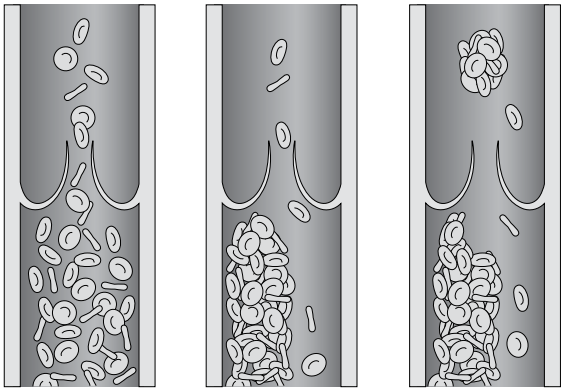
Often deep vein thrombosis has no noticeable symptoms. If you do have symptoms, they can include:

- Pain or swelling in the affected area (such as a leg)
- Redness or warmth in the affected area

Sometimes the first noticeable symptoms are from a pulmonary embolism. These symptoms can include:

- Shortness of breath that comes on suddenly
- Chest pain that gets worse when you breathe deeply or cough
- Coughing or vomiting blood

If you experience symptoms of pulmonary embolism, call 911 and get medical help immediately.



What causes it? What are the risk factors?

Blood clots can be caused by anything that slows or stops blood circulation. This can include inactivity, surgery, injury, or inherited factors. Risk factors include:

- Sitting for a long time, as when you're driving or flying
- Long periods of bedrest, as when hospitalized or paralyzed
- Injury to a deep vein from surgery, a broken bone, or other trauma
- Pregnancy and the first 6 weeks after giving birth
- Birth control pills or hormone replacement therapy
- Cancer and some of its treatments
- Heart failure
- Pacemaker or catheter in a central vein
- Overweight or obesity
- Smoking
- Personal or family history of DVT or embolism

How is it diagnosed?

If your doctor suspects you have DVT, you may be given one or more of these tests:

- **Ultrasound.** Sound waves are used to measure the blood flow through your veins and to identify any blood clots.
- **Venogram.** An x-ray is taken to produce an image of your veins and to identify blood clots.
- **CT or MRI scans.** Computerized tomography (CT) and magnetic resonance imaging (MRI) provide images of the inside of the body, including the veins.
- **Blood tests.** Your blood may be tested for an inherited blood clotting disorder. It may also be tested for a substance called D-dimer, which is usually present in patients with blood clots. If you don't have it, your symptoms are probably not caused by a blood clot.

How can I prevent it?

If you're at risk of having DVT or emboli, or have had one before, take these measure to help prevent having one in the furture.

- Have regular checkups with your doctor. Make sure your prescriptions are still correct.
- Take all your medications as prescribed.
- If you've been in bed after surgery or an illness, get up and walk around as soon as possible.
- If you have to sit for a long time, stand up and walk around every hour. Stretch your legs and feet every 20 minutes while sitting. Drink plenty of water.
- Modify your lifestyle to improve your overall health. Maintain a healthy weight, quit smoking, and control your blood pressure.

How is it treated?

DVT needs to be treated right away. The goal of treatment for DVT is to prevent the blood clot from getting bigger, or becoming an embolism (breaking off and traveling toward the lungs). Treatment also aims to keep you from getting more blood clots. Your treatment may include one or more of the following:

- **Blood thinner medications.** These medications (also called anticoagulants) reduce your blood's ability to clot. They can't break up clots you already have, but they can prevent them from getting bigger. They can also prevent new clots from forming. They're usually taken for at least 3 months.
- **Clot busters.** These medications (also called thrombolytics) are given to break up blood clots. Because they can cause severe bleeding, they're only given in very serious situations.
- **Filters.** If you cannot take medications, you may have a small filter inserted into a large vein in the abdomen called the vena cava. If a blood clot breaks off, this will reduce the chance of it traveling to the lungs.
- **Compression stockings.** These can reduce the swelling that happens after a blood clot forms in your leg. The stockings are tighter near the ankle and looser near the top. This helps keep your blood from pooling and clotting.
- **Self-care.** Your doctor may recommend that you:
  - Elevate your leg.
  - Apply a heating pad for 20 minutes every 2 hours.
  - Keep walking, physical work, and lifting to a minimum.