



# FACTS ABOUT DEEP VEIN THROMBOSIS

Facts for Healthy Living.

**Deep Vein Thrombosis (DVT)** is an under diagnosed, preventable medical condition that occurs when a blood clot forms in a large vein. These clots usually develop in the lower leg, thigh, or pelvis, but can also occur in the arm. It is important to know about DVT because it can happen to anybody and can cause serious illness; disability; and, in some cases death. The good news is that DVT is preventable and treatable if diagnosed correctly and early.

## Q Who is at risk for DVT?

**Answer:** Almost anyone can have DVT. However, certain factors can increase the risk of developing this condition. The risk increases even more for someone who has more than one risk factor at the same time.

**Following is a list of factors that increase the risk of developing DVT:**  
**Injury to the vein, often caused by:**

- Fractures,
- Severe muscle injury, or
- Major surgery (particularly involving the abdomen, pelvis, hip, or legs).

**Slow blood flow, often caused by:**

- Confinement to bed (e.g., due to a medical condition or after surgery);
- Limited movement (e.g., a cast on a leg to help heal an injured bone);
- Sitting for a long time, especially with crossed legs; or
- Paralysis.



**Increased estrogen, often caused by:**

- Birth control pills;
- Hormone replacement therapy, sometimes used after menopause; or
- Pregnancy, for up to 6 weeks after giving birth.

**Certain chronic medical illnesses, such as:**

- Heart disease,
- Lung disease,
- Cancer and its treatment, and Inflammatory bowel disease (Crohn's disease or ulcerative colitis).



**Other risk factors include:**

- Previous DVT,
- Family history of DVT,
- Age (risk increases as age increases),
- Obesity,
- Smoking,
- high blood pressure,
- A catheter located in a central vein, and Inherited clotting disorders. An inherited clotting disorder might be suspected when a person has repeated DVTs that cannot be linked to any specific cause (such as recent surgery) or develops DVT in a vein at an unusual location, such as a vein in the liver, kidney, or brain.

## Q Can DVT be prevented?

**Answer:** Yes, there are some steps that people can take to help prevent DVT.

Move around as soon as possible after having been confined to bed, such as after surgery, illness, or injury.

Talk to your doctor about wearing graduated compression stockings (sometimes called “support hose” or “medical compression stockings”).

When sitting for long periods of time, such as when traveling for more than four hours:

- Get up and walk around every 2 to 3 hours.
- Exercise your legs while you’re sitting by:
  - > Raising and lowering your heels while keeping your toes on the floor
  - > Raising and lowering your toes while keeping your heels on the floor
  - > Tightening and releasing your leg muscles
- Wear loose-fitting clothes.
- Drink plenty of water, and avoid drinking anything with alcohol or caffeine in it.
- Talk to your doctor about medication (anticoagulants) to prevent or treat DVT.
- Exercise regularly, maintain a healthy weight, and don’t smoke.

## Q What complications can result from DVT?

**Answer:** If part of a blood clot breaks off, it can travel through the bloodstream to the lung and cause a pulmonary embolism (PE), which can be fatal.

In addition, nearly one-third of people who have a DVT will have long-term complications (post-thrombotic syndrome), such as swelling, pain, discoloration, and scaling in the affected part of the body. In some cases, the symptoms can be so severe that a person can become disabled.

For some people, DVT becomes a chronic illness; about 30% of people who have had a DVT are at risk for another episode.

**Q** Does DVT cause heart attack or stroke?

**Answer:** No, DVT does not cause heart attack or stroke. There are two main types of blood clots.

How a clot affects the body depends on the type and location of the clot:

- A blood clot in a deep vein of the leg, pelvis, and sometimes arm, is called deep vein thrombosis (DVT). This type of blood clot does not cause heart attack or stroke.
- A blood clot in an artery, usually in the heart or brain, is called arterial thrombosis. This type of blood clot can cause heart attack or stroke.

Both types of clots can cause serious health problems, but the causes and steps you can take to protect yourself are different. To learn more about arterial thrombosis, visit CDC's information about heart disease and stroke prevention.



**Q** What are the symptoms of DVT?

**Answer:** About half of people with DVT have no symptoms at all. For those who do have symptoms, the following are the most common and can occur in the affected part of the body:

- Swelling,
- Tenderness,
- Pain,
- Redness of the skin.

If you have any of the symptoms above, you should see your doctor as soon as possible.

**Q** What are the symptoms of pulmonary embolism (blood clot in the lung)?

**Answer:** With DVT, a piece of the blood clot can break off and travel to the lungs. A blood clot in the lungs is called pulmonary embolism (PE). PE is very serious and can cause death.

- Difficulty breathing;
- Faster than normal heart beat;
- Chest pain or discomfort, which usually worsens with a deep breath or coughing;
- Very low blood pressure, lightheadedness, or blacking out.

*If you have any of the symptoms above, you should seek medical help immediately.*

Unfortunately, there are other conditions whose symptoms are similar to those of DVT and PE. For example, muscle strains and swelling of veins close to the skin can mimic the symptoms of DVT. Heart attack and pneumonia have symptoms similar to those of PE. Therefore, it is difficult to diagnose either condition without tests.

## How are DVT and pulmonary embolism diagnosed?

**Answer:** DVT is often diagnosed using:

Duplex ultrasound—It uses sound waves to evaluate the flow of blood in the veins.

Venography—If the duplex ultrasound does not provide a clear diagnosis, a venogram, a type of X ray, is used to look at the veins.

**DVT also can be diagnosed using the following, less frequently used, tests:**

In many cases, magnetic resonance imaging (MRI) can provide information that would not show up on an X ray. This test is being used more frequently to diagnose DVT.

A computed tomography scan is a special type of X ray that can provide pictures of structures inside the body. However, this test is rarely used to diagnose DVT.

Tests to find the location of and damage to the lungs caused by a pulmonary embolism (PE) include:

Computerized tomography (CT scan) of the lung, a special type of X ray that can provide pictures of structures inside the body.

Pulmonary ventilation or perfusion scan, a special test looks at how the lung is working and if it is getting enough blood.

Pulmonary angiogram, another special type of X ray, to look for a blockage in the lung.

## What is the treatment for DVT and pulmonary embolism (PE)?

**Answer:** DVT Treatment Medication is used to prevent and treat DVT. Anticoagulants (blood thinners) are the medicines most commonly used.

Compression stockings (also called graduated compression stockings) are sometimes recommended to prevent DVT and relieve pain and swelling. These might need to be worn for 2 years or more after having DVT.

In severe cases, the clot might need to be removed surgically.

### **Pulmonary Embolism (PE) treatment**

Emergency treatment at a hospital is necessary to treat PE. In cases of severe, life-threatening PE, there are medicines that can dissolve the clot (thrombolytics) and medicines that prevent more clots from forming (anticoagulants).

Surgery is sometimes needed for patients at great risk having another PE.