# WHAT YOU NEED TO KNOW ABOUT DVT

It's important to know the facts about DVT, so you can take steps to reduce your risk of this serious condition.

#### What Is DVT?

Deep-vein thrombosis (DVT) is a common but serious medical condition that occurs when a blood clot forms in a deep vein, usually in the calf or thigh, and either partially or completely blocks the flow of blood in the vein. DVT affects approximately 2 million Americans each year, requiring as many as 600,000 to be hospitalized.

In some cases, DVT leads to a pulmonary embolism (PE). This is when a fragment of the clot or the clot itself breaks loose from the wall of the vein and travels to the lungs, where it blocks an artery that carries blood from the heart to the lungs. PE causes approximately 300,000 deaths in the United States each year<sup>2</sup>— more than breast cancer and AIDS combined.<sup>1</sup>

## When can you get DVT?3

Blood clots can appear spontaneously with no prior warning; however, certain conditions may increase your risk. Genetic and environmental factors may play a part in causing this condition. Below are partial list of risk factors or events that can increase the risk of DVT:

- ➤ Congestive heart failure or respiratory failure
- ➤ Restricted immobility
- **C**ancer
- > Infection
- ➤ Obesity
- > Age over 40 years
- > Surgery
- ➤ Varicose veins
- ➤ Prior history or family history of VTE (DVT or PE)
- > Chronic lung disease
- > Inflammatory bowel disease
- > Smoking

\*For more information on high-risk groups, see "Are You in a High-Risk Category?" included in the KNOW section of this toolkit.



Your risk for DVT is increased if you are immobile for long periods of time, such as during extended hospital stays or when you have injuries or illnesses that restrict your movement.

It is important to become familiar with the symptoms of DVT, especially if you have limited or no mobility, as almost half of all cases of DVT have few symptoms — or none at all.

If you notice any of the following, especially in the leg, consult your doctor:<sup>4</sup>

- > Pain
- Swelling
- > Tenderness
- > Redness
- > Skin that is warm to the touch

Get medical help immediately if you experience any of the following:<sup>4</sup>

- > Unexplained shortness of breath
- ➤ Chest pain
- > Rapid heartbeat
- > Unexplained coughing
- > Cough up blood

## Who can help you reduce your risk?<sup>5</sup>

Work with all your healthcare providers to track your risk factors and adopt healthy and safe behaviors that can help you reduce them. Be sure to talk to with any healthcare professionals who may be treating you for:

- ➤ Critical care/ER issues (if you have to go to the emergency room)
- > Heart or lung conditions
- > Acute infections
- ➤ Hip- or knee-replacement surgery
- > Cancer
- > Women's health
- > Annual checkup
- > Abdominal surgery

There are proactive steps you can take that can help you reduce your risk of DVT. Keeping active and maintaining a healthy diet can make you feel better overall, while also helping you reduce your risk. You can also reduce your risk by:

- ➤ Avoiding sitting or laying down for long periods of time
- > Reducing blood cholesterol levels



- > Talking with your doctor about leg and calf exercises you can perform before and after surgery
- > Stopping or avoiding smoking
- ➤ Choosing looser, less restrictive clothing
- > Stay hydrated

### Why should you be aware?

One in 20 people will get DVT in a lifetime,<sup>6</sup> but you can protect yourself and reduce your risk by being alert and aware. Your doctor can diagnose DVT by identifying any risk factors you may have and conducting a physical examination. It may be hard to diagnose DVT without specific tests, because a number of other conditions — such as muscle strains and skin infections — produce similar symptoms.<sup>5</sup>

If you have DVT, getting treatment right away can help reduce the risk of complications such as PE. The main goals in treating DVT are to stop the blood clot from getting larger, reduce the chance of developing additional clots, and reduce the risk of the clot breaking off and traveling to the lungs.<sup>5</sup>

<sup>&</sup>lt;sup>6</sup> James Hirsch, Thrombosis (Toronto: Key Porter Books, 2005) 14.



<sup>&</sup>lt;sup>1</sup> Gerotziafas GT, Samama MM. Prophylaxis of venous thromboembolismin medical patients. CurrOpin PulmMed. 2004;10:356-365.

<sup>&</sup>lt;sup>2</sup> Heit et al. Am Soc Hematol. Presented at: 47th Annual Meeting and Exposition, American Society of Hematology; December 2005; Atlanta, GA, Poster [68].

<sup>&</sup>lt;sup>3</sup> Geerts WH, Pineo GF, Heit JA, et al. Prevention of venous thromboembolism: The Seventh ACCP Conference on Antithrombotic and ThrombolyticTherapy. Chest.2004;126(suppl):338S-400S.

<sup>&</sup>lt;sup>4</sup> American Public Health Association. Presented at: Public Health Leadership Conference on Deep-Vein Thrombosis: February 26, 2003: Washington, D.C. White Paper.

<sup>&</sup>lt;sup>5</sup> Clot Care Online Resource. Understanding deep vein thrombosis. Preventing a DVT. Available at http://www.clotcare.com/clotcare/dvt.aspx

# ARE YOU IN A HIGH-RISK CATEGORY?

Although DVT can occur in almost anyone, certain people may be at higher risk of developing a blood clot. If you fall into one of the following identified high-risk categories, talk to your doctor about what you can do to protect yourself from DVT.

- Cancer patients undergoing surgical procedures have at least *twice* the risk of postoperative DVT than non-cancer patients undergoing similar procedures.
  Cancer may cause clotting factors in the blood to *increase*. Clotting factors may also be affected as a result of an *infection or injury to a blood vessel or following surgery*.
- ➤ Obese patients may not be able to dissolve blood clots properly which may *greatly increase their* risk of DVT after surgery.
- ➤ Patients with an inherited clotting disorder e.g. Factor V Leiden are at an *increased* risk for developing DVT. If both parents were affected, their risk is at its *highest*.
- ➤ In patients with prolonged immobility or no mobility, blood flow can slow down and lead to *blood* "pooling," or accumulating in the extremities, thereby greatly increasing risk of DVT.
- ➤ In elderly patients, DVT is associated with a 21% one-year mortality rate. While most victims are 60 years of age or older, DVT can strike anyone at risk.
- ➤ 60% of patients with leg fractures develop *clot fragments*, which block pulmonary circulation and may be fatal.
- **Women taking oral contraceptives or hormone replacement** may be at *increased* risk of developing DVT.
- **Patients with pulmonary embolism** may experience shortness of breath, an apprehensive feeling, chest pain, rapid pulse, sweating or a bloody cough.
- ▶ 1/3 of patients who have experienced venous thromboembolism develop it again within eight years of the initial event.
- **Patients with congestive heart failure** have *three times* the risk for developing blood clots.
- **Patients who smoke** have an *increased* risk of blood clots. Smoking *reduces* the amount of oxygen carried in the blood, which damages vessel walls, *increasing* the risk of blood clots.
- > 50% of patients with deep-vein thrombosis or pulmonary embolism have "silent" or minimal symptoms.

