**What causes VTE?**

Blood clots form when something slows or changes the flow of blood in the veins. These clots can form in, or travel to, arteries or veins in the brain, heart, kidneys, lungs and limbs. They can cause heart attack, stroke and damage to the body’s organs or even death.

Clotting is more likely to happen in people who smoke, take estrogens or birth control pills, or have conditions such as cancer; autoimmune disorders such as lupus; and are obese. It’s also more likely in people whose blood is thicker than normal because too many blood cells are made by bone marrow. Recent surgeries, most commonly in the hip, knee or pelvis, also can increase risk.

A genetic, or inherited, source of excessive blood clotting is less common. Genetic defects can occur in the proteins needed for clotting and with the substances that delay or dissolve blood clots.

VTE is most common in adults 60 and older, but it can occur at any age. It’s rare in children. Young patients with venous thrombosis usually have strong predisposing factors, such as multiple trauma, leg fractures or indwelling central venous lines.

**How is it diagnosed?**

A D-dimer blood test and a Doppler ultrasound exam of the legs are used to diagnose DVT. Certain blood tests may also help check for an increased chance of blood clotting.

**How can VTE be prevented?**

VTEs often are preventable, with strategies that stop the development in people “at-risk”. Healthcare professionals discern risk by gathering information about a patient’s age, medical history, medications and lifestyle factors.

Those at risk may take anti-clotting, blood-thinning medications or use mechanical devices such as compression stockings and a cuff. Some may also be instructed to move around or do foot/leg exercises as soon and as often as possible. Anyone who is inactive and sits for a long time, or smokes, is at risk.

**How is it treated?**

Treatment typically includes medications to break up clots and prevent new ones from forming.
Options include:

- Anticoagulants, including injectables such as heparin or low molecular weight heparin, or tablets such as apixaban, dabigatran, rivaroxaban, edaxaban and warfarin.
- Equipment such as compression stockings and air compression cuffs and garments for the legs, calves, arms or chest that fill with compressed air and help increase blood flow.
- Thrombolytic therapy, which includes drugs such as a tissue plasminogen activator (tPA) — a clot-dissolving enzyme.

In rare cases, surgery may be needed. It may involve placing a filter in the body’s largest vein to prevent blood clots from traveling to the lungs, removing a large blood clot from the vein or injecting clot-busting medicines.

To reduce your risk, your doctor may prescribe you drugs to keep blood clots from forming.

**How can I learn more?**

1. Call 1-800-AHA-USA1 (1-800-242-8721), or visit heart.org to learn more about heart disease and stroke.
2. Sign up to get Heart Insight, a free magazine for heart patients and their families, at heartinsight.org.
3. Connect with others sharing similar journeys with heart disease and stroke by joining our Support Network at heart.org/supportnetwork.

**Do you have questions for the doctor or nurse?**

Take a few minutes to write your questions for the next time you see your healthcare provider.

For example:

**Am I at risk for VTE?**

What changes can I make to prevent it?

We have many other fact sheets to help you make healthier choices to reduce your risk, manage disease or care for a loved one. Visit heart.org/answersbyheart to learn more.