



Who is at Risk for Venous Thromboembolism?

Venous thromboembolism (VTE) can affect men and women of all ages, races and ethnicities. People the highest risk like those with cancer, having surgery, or with major trauma like fractures or immobilization, should ask about getting prevention treatments. Hospitalization for any reason increases the risk.



What are risk factors for VTE?

You may be at risk for VTE if you have:

- Major general surgery
- Major orthopedic surgery
- Lower-extremity paralysis due to spinal cord injury
- Fracture of the pelvis, hip or long bones
- Multiple trauma
- Cancer — all cancers increase the risk, especially if the cancer has spread widely, and if it is cancer of the lung, brain, lymphoma, gynecologic system (like ovary or uterus), or gastrointestinal tract (like pancreas or stomach). In patients with cancer, chemotherapy and cancer surgery further increase the risk.

What other factors could put me at risk?

Individually, the factors below are not enough to justify preventive measures for VTE. But a combination of two or more may be cause for action and could influence the type and duration of the prevention treatment.

- **Prior VTE** — Patients with a previous episode of VTE have a high chance of recurrence.
- **Age** — Patients older than 40 years are at higher

risk, and that risk doubles with each subsequent decade.

- **Obesity** — people who are obese have two times the risk of VTE as people with normal weight, and the higher the weight, the higher the risk.
- **Immobility** — Prolonged immobility combined with other major risk factors increases the risk of VTE.
- **Oral contraceptives or estrogen treatment for menopause symptoms**
- **Family history of VTE** — especially if this is in a first-degree relative (parent, sibling, child).
- **Physical inactivity**
- **Genetic blood conditions that affect clotting**

Can pregnancy increase risk for VTE?

Yes. Women who are pregnant, or have just had a baby, are at greater risk of developing a blood clot. The risks is greater in the presence of the following other factors:

- Previous VTE
- A genetic predisposition to VTE or a family history of VTE (especially in a first degree relative – parent or sibling)

(continued)



- Obesity
- Prolonged immobility, such as bed rest and long distance travel
- Twin gestation
- Older maternal age
- Other medical illness during pregnancy, like cancer, serious infection or toxemia/pre-eclampsia

What are the warning signs of VTE?

DVT (deep vein thrombosis) mainly affects the large veins in the lower leg and thigh, almost always on one side of the body at a time. The clot can block blood flow and cause:

- Leg pain or tenderness of the thigh or the calf
- Leg swelling (edema)
- Skin that feels warm to the touch
- Reddish discoloration or red streaks of the skin

PE (pulmonary embolism) can be fatal and occurs when the DVT breaks free from a vein wall and blocks some or all of the blood supply to the lungs, causing:

- Unexplained shortness of breath



- Rapid breathing
- Chest pain anywhere under the rib cage (may be worse with deep breathing)
- Fast heart rate
- Light headedness or passing out

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:

What risk factors do I have for VTE?

What changes can I make to prevent it?

My Questions:

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.