SIGVARIS

A Guide to Healthier Legs

Are You at Risk?

Leg problems are widespread throughout the world. According to the American College of Phlebology, more than 80 million Americans suffer from some form of venous disorder. If you have tired, aching, swollen legs, or if you see the beginning of varicose veins, this brochure will help you learn how to improve the health of your venous circulation. Venous circulation problems can progressively worsen over time and can affect your health and quality of life.

Risk Factors for Venous Disorders

- Heredity
- Age over 40
- Pregnancy
- Obesity
- Prolonged sitting or standing
- Long distance travel
- Sedentary lifestyle
- Surgery or trauma
- Infectious disease
- Use of hormone medication

Symptoms of Venous Disorders

- Heavy, tired, or aching legs
- Initial signs of varicose veins
- A feeling of tension, cramps, or fatigue in your legs
- Swollen ankles/feet
- Spider veins
- Skin discoloration or problems
- Leg Ulcer

Keeping Your Legs Healthy

Do you ever experience aching or pain in your legs? For those of us who work in jobs where we have to stand for a living (healthcare workers, service men & women, teachers, factory workers, retail sales representatives, etc.) we know firsthand how tired our legs can become after a long day on the job.

In fact, leg problems affect approximately one out of every five working men and women and cost US corporations more than 2 million lost workdays a year. And it's not just people who stand for a living, many factors can attribute to leg pain and discomfort. Understanding your symptoms and risks can help you determine if you are at risk for developing a venous disorder and what you can do to help prevent it.

Did You Know? According to The Journal of Occupational and Environmental Medicine, medical compression socks have been proven more effective at reducing aches and pain in the legs than industrial rubber floor mats.

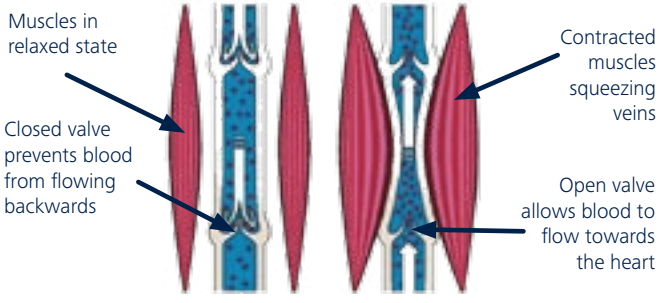
Lets Review the Circulatory System

The body has a number of ways to help blood return to the heart. Just as the arterial system uses the power of the heart to drive fresh blood into the tissues, the calf muscle acts as a 'second heart' by contracting and relaxing as a person walks, propelling blood upward.

One-way valves in the superficial and deep veins help blood to flow back to the lungs and heart. The deep venous structure handles the vast majority of the venous blood volume and is the high pressure system of the venous circulation in the legs. The remaining blood volume is handled by the superficial system. When calf muscles relax, the valves close to prevent blood from flowing backwards into the lower part of the vein. These valves are fragile and can be easily damaged.

Other 'pumps' help push blood toward the heart, such as the ankle, the foot, and the diaphragm.

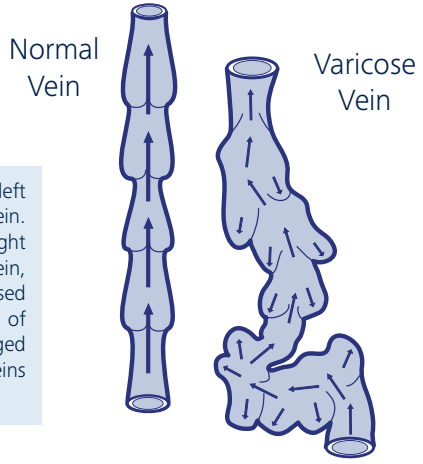
Valves Close to Promote Upward Blood Flow



What Are Venous Disorders?

Venous insufficiency is caused by a series of disorders in the vein including when the valves of the veins fail to function properly. This interferes with venous return and causes blood to pool in the veins.

Venous insufficiency can become more chronic and lead to spider veins, varicose veins, phlebitis, blood clots, and changes in the skin. The most serious disorder is a venous leg ulcer.



The vein on the left shows a normal vein. The vein on the right shows a varicose vein, which is often caused by the pooling of blood in a damaged vein. Varicose veins can be painful.

Chronic Venous Disorders (CVD) is a collective term used to describe a long-standing condition involving impaired venous return in varying degrees of severity. Symptoms of CVD include:

- Edema (swelling)
- Feeling of heaviness in the legs
- Pain or cramps in the calves
- Skin discolorations
- Dermatitis (skin problems)
- Dry or weeping eczema
- Venous leg ulcer
- Visible Veins

Deep Vein Thrombosis

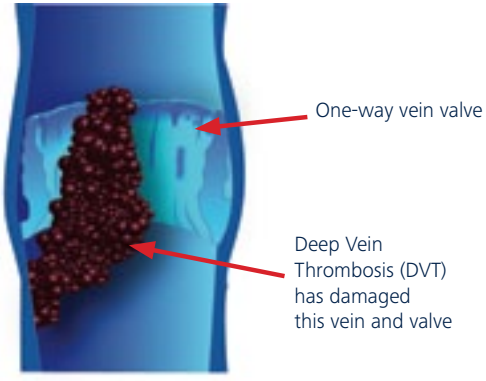
DVT [deep vein thrombosis] is a blood clot that usually forms in the deep veins of the lower leg, or calf which can block the flow of blood. A DVT may cause leg pain or swelling, but can also present with no symptoms.

Another complication from a DVT is the condition known as pulmonary embolism (PE) which is when the clot breaks loose and travels through the vessel to the arteries located in the lungs, which is a potentially fatal condition if it significantly blocks blood flow through the lungs.

Generally, a DVT is caused by a combination of two out of three underlying conditions:

1. Slow or sluggish blood flow through a vein
2. A tendency for a person's blood to clot quickly, a condition that sometimes runs in families
3. Irritation or inflammation of the lining surface of the vein

The symptoms of a DVT can go unrecognized.



Symptoms of a DVT include:

- Pain and tenderness in one leg
- Swelling in one leg
- Increased warmth and redness in one leg
- Visible surface veins

Complications of DVT

About one-third of patients with DVT, develop a long-term complication known as post-thrombotic syndrome (PTS). This condition can show up as chronic pain, swelling and discoloration of the leg, as well as the development of open ulcers, caused by the damage that is done by the clot to valves in the veins. The likelihood of another clot forming is high once you have had a DVT. The effects of PTS are long lasting and can lessen one's quality of life.

You can prevent DVTs by:

- Exercising regularly, including stretching and leg movement when travelling
- Smoking cessation
- Maintaining a normal body weight
- Eating a healthy diet
- Wearing compression stockings or socks, which reduces the risk of DVT or complications by 50%

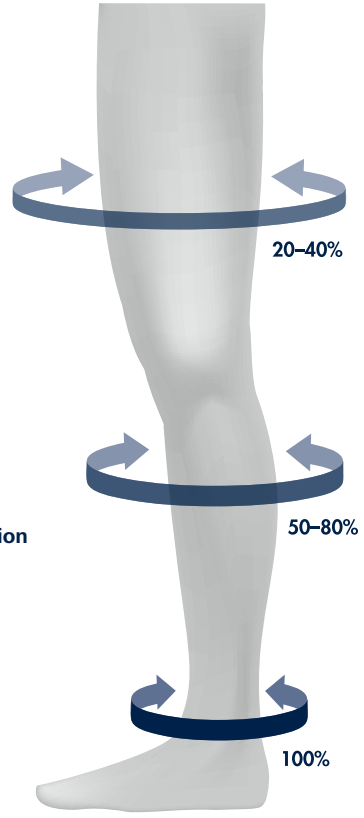
Did You Know?

- 74% of adults have little to no awareness of DVT
- More people die each year in the US from DVT complications than motor vehicle accidents, breast cancer and AIDS combined
- A pregnant woman is 5-6 times more likely to develop DVT than a non-pregnant woman
- 40% of DVT patients will develop more blood clots within 1-2 years
- **Wearing compression stockings or socks reduces the risk of DVT or complications by 50%[1]**

How Graduated Compression Works

How does graduated compression therapy help with the management of venous problems? As a person walks, the contraction and relaxation of the calf muscles around the veins aid in moving blood toward the heart. The external graduated compression of SIGVARIS socks and stockings acts as a layer of muscle by gently squeezing the stretched vein walls together, allowing the valves to close. The cavity of the vein is reduced, thereby restoring blood flow to a normal state and aiding overall circulation. To be most effective, the socks or stockings should be put on at the start of your day and removed before you go to bed.

Some people have an inherited weakness of the vein walls or valves which creates additional challenges to venous return. Wearing SIGVARIS graduated compression socks or stockings is vital for the prevention and treatment of varicose veins and other circulatory problems.



Graduated Compression
Compression is greatest at the ankle, gradually decreasing up the leg.

Anti-Embolism vs. Medical Compression Stockings

The biggest difference between Anti-Embolism Stockings and Medical Compression Stockings is the compression level and the medical reason for which it is worn. Anti-Embolism Stockings are usually 8–18mmHg, while medical compression stockings are a medically-measured 15–20mmHg or higher. In addition, the purpose of anti-embolism stockings is to maintain normal venous return in a *bedridden* patient.

SIGVARIS MEDICAL Compression Hosiery and Socks are used to treat venous and lymphatic disorders in *ambulatory* patients. Medical compression stockings are used for all stages of Chronic Venous Insufficiency, including varicose veins, edema, stasis skin changes and venous procedures. They may also be used in preventing and treating Post-Thrombotic Syndrome. According to medical research, ambulatory patients with Chronic Venous Disorders require more compression than is available in anti-embolism stockings.

A simple rule of thumb:

If the patient is *laying in the bed* = anti-embolism stockings
If the patient is *ambulatory* = medical graduated compression stockings

Why SIGVARIS?

SIGVARIS has an assortment of products designed to fit your lifestyle. These products can help improve your circulation, increase your energy and aid in keeping your legs healthy. Your physician, pharmacist or SIGVARIS Certified Fitter can help you determine which SIGVARIS product is right for you. SIGVARIS guarantees the compression level in our products for 6 months.

SIGVARIS MEDICAL **SIGVARIS** WELL BEING **SIGVARIS** SPORTS

SIGVARIS MEDICAL **(Prescription)**

For moderate and more severe symptoms: 15–20, 20–30, 30–40, 40–50, 50–60mmHg

The **SIGVARIS** MEDICAL collection is designed according to the unique SIGVARIS PFS^2 System to ensure correct fit and accurate compression, resulting in optimum therapeutic benefits and greater wearing comfort.

SIGVARIS WELL BEING **(OTC)**

For prevention and mild symptoms: 15–20mmHg

The fashionable **SIGVARIS** WELL BEING collection helps promote leg health and provides relief from a range of common symptoms including tired, aching legs and swollen feet and ankles.

SIGVARIS SPORTS

For performance and recovery: 15–20mmHg & 20–30mmHg

SIGVARIS has an entire line of sports products perfect for athletic activity and recovery.

Your Doctor Can Help

Effective methods for the treatment of venous disorders are readily available. Your physician can provide a diagnosis to correctly assess your condition and to take appropriate therapeutic measures. **SIGVARIS** MEDICAL socks or stockings have long been the brand of choice by physicians for active vein disorders of the leg, or as a preventative measure in cases when risk factors are present. They are also prescribed after surgery for patients who are not confined to bed.

Filling your prescription is easy. Simply go to a certified SIGVARIS dealer, where a trained fitter takes your measurements and can recommend the correct socks or stockings for you based on your physician's advice.

Dealer Location:
sigvarisusa.com/find

How to Play Your Part to Keep Your Legs Healthy

Six easy steps to better blood flow

1. ***Avoid sitting or standing for long periods of time.*** Our circulation improves with physical activity, so GET UP! Take a short walk, climb stairs, or make an effort to move around the office and at home. Avoid prolonged sitting or standing as this may increase leg pain and swelling.
2. ***After a long tiring day, especially during the summer, revitalize your legs with a cool shower or bath.*** Avoid extended exposure to heat from sunbathing, hot baths, or the sauna as excessive heat will cause your veins to dilate and may induce swelling.
3. ***Elevate your legs.*** To boost your body's natural circulation, elevate your legs while you are sitting on the sofa or lying in bed at home. At the office, keep a leg rest under your desk.
4. ***Work out.*** Regular exercise helps keep your body healthy. Some sports are better for improving circulation, such as swimming, walking, biking and yoga.
5. ***Control your weight.*** When you manage your weight through a healthy diet and regular exercise, you are more likely to have less leg symptoms and/or less swelling.
6. ***Wear graduated compression socks and stockings.*** SIGVARIS quality compression socks and stockings improve venous circulation to prevent and treat venous problems.

Who Should Wear SIGVARIS?

SIGVARIS graduated compression is medicine you wear. It should be recommended to:

- Patients who stand or sit for long periods of time daily
- Patients who have been prescribed anticoagulants
- People who travel
- Women who are pregnant
- Those who have had a Deep Vein Thrombosis (DVT)
- Those who experience swelling in their legs and feet
- Patients with varicose and/or spider veins

Keeping Your Legs Healthy During Travel

Have you ever wondered why people wear compression socks or stockings when they travel? As more people travel long distance by air and car, the problem of travel-related leg discomfort is on the rise.

Five Tips to Keep Your Legs Feeling Great When Traveling:

1. Wear SIGVARIS graduated compression socks or stockings to improve circulation and help prevent travel-related DVT.
2. Keep your feet moving. Foot exercises make the calf muscles work and help pump blood back up to the heart.
3. Avoid long periods of inactivity. As often as possible, get up and move around. When traveling in a car, make regular rest stops to walk around.
4. Drink plenty of healthy fluids.
5. Ask your family physician for info regarding the prevention of DVTs and other venous problems.

Keeping Your Legs Healthy While Expecting

Pregnancy plays a role in the development of varicose veins. Thirty percent of women pregnant for the first time, and 55% of women who have had two or more full term pregnancies develop varicose veins, according to a report by Swiss Medical Weekly. Women who are pregnant are also at a high risk for the development of a Deep Vein Thrombosis, known as DVT. One reason is due to the increased blood volume at full term. Additionally, pregnancy causes hormonal changes that increase blood coagulability, a measure of how easily blood clots. Wearing compression socks can help keep your legs healthy during pregnancy and beyond.

Maternity Products

SIGVARIS offers a wide range of stockings designed to promote women's leg health during pregnancy.

Get relief for:

- Heavy, tired or achy legs
- Swollen ankles and feet
- Varicose or spider veins

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Courtesy of:

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please visit: **bit.ly/SIGfind**

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Sources: [1]Brandjes DP. Et al. Lancet 1997, American Public Health Association White Paper: Deep Vein Thrombosis: Advancing Awareness to Protect Patient Lives, February 26, 2003, US Surgeon General Office: **surgeongeneral.gov**, American Venous Forum: **venous-info.org**, Venous Disease Coalition: **venousdiseasecoalition.org**, Vascular Disease Foundation: **vdf.org**.

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