

Peripheral Vascular Disease (PVD)

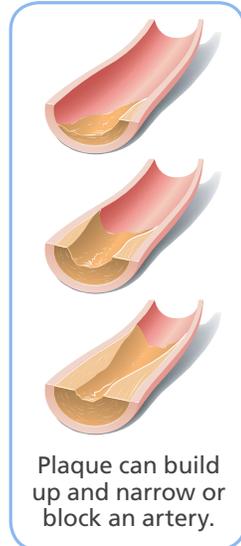
What is peripheral vascular disease?

Vascular disease is disease of the blood vessels (arteries and veins). Peripheral vascular disease (PVD) affects the areas that are “peripheral,” or outside your heart.

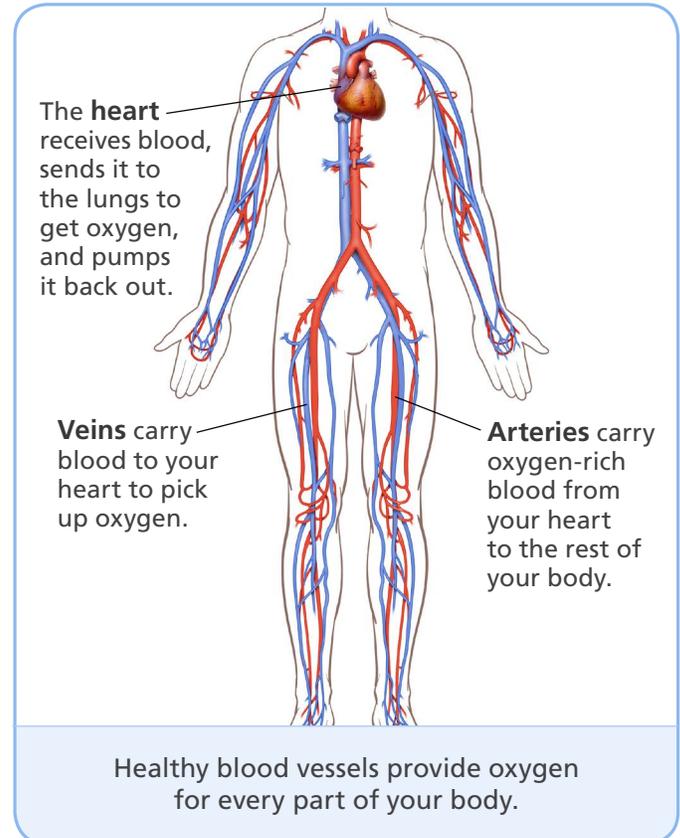
The most common types of PVD are:

- **Carotid artery disease affects the arteries that carry blood to your brain.** It occurs when one or more arteries are narrowed or blocked by plaque, a fatty substance that builds up inside artery walls. Carotid artery disease can increase your risk of stroke. It can also cause **transient [TRANZ-ee-ent] ischemic [iss-KEE-mik] attacks (TIAs)**. TIAs are temporary changes in brain function that are sometimes called “mini-strokes.”

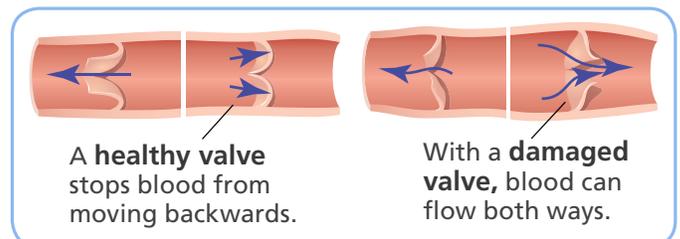
- **Peripheral arterial disease (PAD) often affects the arteries to your legs and feet.** It is also caused by plaque buildup, and can cause pain that feels like a dull cramp or heavy tiredness in your hips or legs when you exercise or climb stairs. This pain is sometimes called **claudication**. If PAD worsens, it can cause cold skin on your feet or legs, skin color changes, and sores that don't heal.



- **Deep vein thrombosis (DVT) affects the veins, usually in your legs or feet.** A clot (thrombosis) forms inside the vein. The clot can break free and travel to your lungs, where it can cause serious illness or even death.



- **Venous insufficiency affects the veins, usually in your legs or feet.** Your veins have valves that keep blood from flowing backward as it moves toward your heart. If the valves stop working, blood backs up in your body, usually in your legs. Venous insufficiency can cause pain and swelling in your legs, ankles, and feet. It can also cause discolored skin, leg sores, or varicose (enlarged, visible) veins.



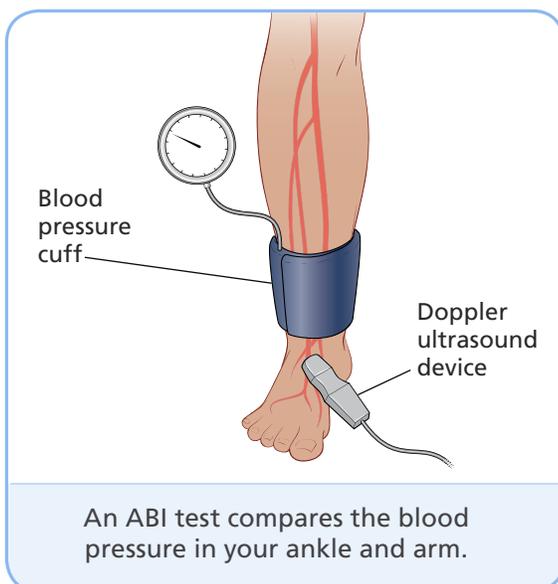
How is PVD diagnosed?

To confirm that you have PVD, your doctor will recommend one, or both, of the tests listed below. Generally, you don't need to prepare beforehand, and they usually take less than an hour. You will probably get your results at a follow-up appointment.

Ankle-brachial index (ABI) test

An ABI test compares the blood pressure in your ankle and your arm. Here's what happens during an ABI test:

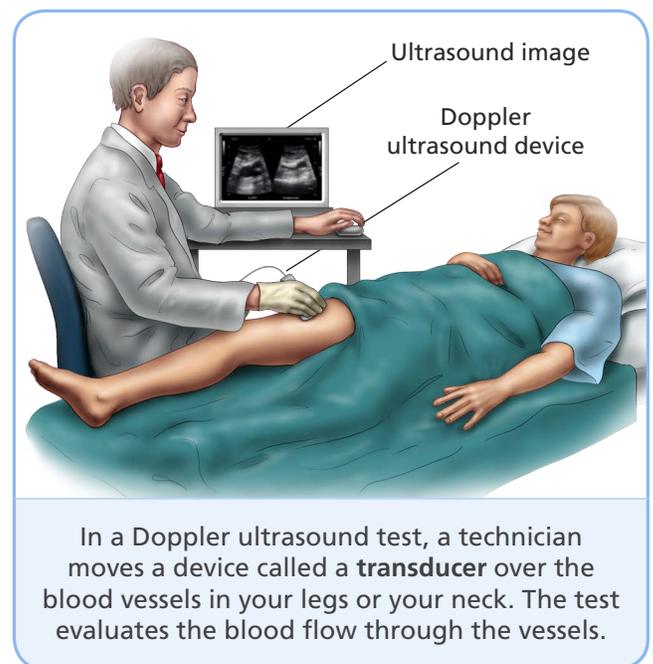
- You may change into a gown and lie down on an exam table.
- A technician will place blood pressure cuffs on your arms and ankles and inflate the cuffs.
- As the cuffs deflate, a technician will hold an ultrasound device called a **transducer** against each ankle and arm. The device uses high-frequency sound waves to measure the blood pressure in each area.
- The ankle blood pressures are divided by the highest arm pressure to create an **ABI ratio**. A ratio lower than normal means you probably have PAD.
- Depending on your situation, you may be asked to exercise on a treadmill. You will then have another ABI test.



Doppler ultrasound

A Doppler ultrasound test uses high-frequency sound waves to check the flow of blood in your blood vessels. Doppler ultrasound can be used on the blood vessels in your legs, neck, or abdomen. Here's what happens during a Doppler ultrasound test:

- You may change into a gown and lie down on an exam table.
- A technician will put water-based gel on the area being studied.
- A Doppler ultrasound device, called a **transducer**, is moved along your skin over the area that is being studied. The test can show narrowed blood vessels, blood clots, or areas where the blood is flowing backward.
- At the end of the test, the technician will wipe off the ultrasound gel so that you can get dressed.



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