# Vascular Screening

# Commercial vascular screening services are widely available.

These types of community health screenings typically are offered by private companies, sometimes in partnership with hospitals. The screenings may be offered in vehicles similar to mobile blood banks or provided in schools, churches, or community centers. These tests generally look for problems in your **cardiovascular** (heart and blood) system that could be associated with a heart attack or stroke.

#### Types of Vascular Screening Tests

Typical screening tests include the following:

- Stroke/carotid artery ultrasound measures blockages in the arteries to the brain. This test is recommended for people with risk factors for vascular disease like high blood pressure.
- Echocardiogram ultrasound shows the heart's structure and beating function. This is generally not recommended as a screening test for people without symptoms of heart problems or high blood pressure.
- Abdominal aortic aneurysm ultrasound measures the size of the major artery that is located in the stomach area. This test is recommended 1 time only for men aged 65 to 75 years who have ever smoked.
- Electrocardiogram uses electrodes attached to the chest to evaluate the electrical activity of the heart. Screening for atrial fibrillation (irregular heartbeat) is typically mentioned. This test is generally not recommended as a screening test for patients without symptoms of heart trouble.
- Ankle brachial index measures peripheral artery disease ("hardening of the arteries" in the legs) using blood pressure cuffs on the arms and above the ankles. This test is useful for vascular disease screening in the legs for some people.

## **Usefulness of Vascular Screening**

Vascular screening tests can be helpful for identifying problems early, before they become serious. However, studies of these tests often have confusing results, and some physician groups offer conflicting advice about the usefulness of these tests. Detailed recommendations about these tests are found on the websites listed on this page.

Although the tests may identify problems you are not aware of, the tests can have what are known as false-positive results, meaning that the test suggests there is a problem when there is not one. When this happens, more tests may be ordered, causing unnecessary additional testing, which may be costly and involves some risk.

#### Tips for Vascular Health

Report symptoms—such as shortness of breath, leg pain, difficulty walking, or chest pain—to your doctor, who can recommend specific, appropriate tests. If possible, maintain a relationship with your doctor and follow his or her advice about how often to have a checkup. Your doctor can screen for diseases that can be prevented, assess your risk of future medical problems, encourage a healthy lifestyle, and update needed vaccinations.

Diseases that are commonly screened for include

- Breast cancer and cervical cancer in women
- Colorectal cancer
- Diabetes
- High blood pressure
- High cholesterol
- Osteoporosis
- Prostate cancer in men

In most cases, the recommendations based on screening test results are to increase healthy behaviors. No matter your age, sex, or risk factors, it is important to eat low-fat foods, including plenty of fruits and vegetables; to not smoke; and to exercise regularly.

## FOR MORE INFORMATION

- American Academy of Family Physicians familydoctor.org/familydoctor/en/prevention-wellness/staying -healthy/healthy-living/preventive-services-for-healthy-living .printerview.all.html
- National Library of Medicine www.nlm.nih.gov/medlineplus/healthscreening.html
- US Preventive Services Task Force www.ahrq.gov/clinic/uspstfix.htm
- National Heart, Lung, and Blood Institute www.nhlbi.nih.qov
- American Heart Association circ.ahajournals.org/content/122/25/2748.full.pdf
- To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA's website at jama.com. Many are published in English and Spanish.

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Sources: American Academy of Family Physicians; National Library of Medicine; US Preventive Services Task Force; National Heart, Lung, and Blood Institute; American Heart Association; Centers for Medicare & Medicaid Services.

Correction: This article was corrected on September 24, 2013, to correct the Sources information.

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