

Screening for Carotid Artery Stenosis

The U.S. Preventive Services Task Force (Task Force) has issued a **final** recommendation statement on *Screening for Carotid Artery Stenosis*.

This final recommendation statement applies to adults who do not have signs or symptoms of a stroke and who have not already had a stroke or a transient ischemic attack (a “mini-stroke”). People with signs or symptoms of a stroke should see their doctor immediately.

What is carotid artery stenosis?

Carotid artery stenosis is the narrowing of the arteries that run along each side of the neck. These arteries provide blood flow to the brain. Over time, plaque (a fatty, waxy substance) can build up and harden the arteries, limiting the flow of blood to the brain.

The final recommendation statement summarizes what the Task Force learned about the potential benefits and harms of screening for carotid artery stenosis: Health professionals should not screen the general adult population.

This fact sheet explains this recommendation and what it might mean for you.

Facts About Carotid Artery Stenosis

Carotid artery stenosis is one of many risk factors for stroke, a leading cause of death and disability in the United States. However, carotid artery stenosis is uncommon—about ½ to 1% of the population have the condition. The main risk factors are older age, being male, high blood pressure, smoking, high blood cholesterol, diabetes, and heart disease.

Screening and Treatment for Carotid Artery Stenosis

Carotid artery stenosis screening is often done using ultrasound, a painless test that uses sound waves to create a picture of the carotid arteries. Health care professionals can look at the pictures to see whether the arteries are narrowed or blocked by plaque. Listening to the neck with a stethoscope for unusual sounds from the arteries (“a bruit”) is another way some may screen.

The main treatments for patients with carotid artery stenosis are lifestyle changes, medicines, and surgery. Important lifestyle changes include quitting smoking, being physically active, maintaining a healthy weight, and eating a healthful diet. Health professionals also may recommend medicines to reduce high blood pressure and high blood cholesterol and blood thinners, which can prevent blood clots (a risk factor for stroke). Surgery may be done to remove the blockage and increase blood flow through the arteries.

Potential Benefits and Harms of Carotid Artery Stenosis Screening and Treatment

The Task Force reviewed studies on the benefits and harms of screening for carotid artery stenosis. They found that screening in the general population has little or no benefit for preventing stroke.

The Task Force also found that carotid artery stenosis screening has potential harms. Ultrasound screening does not by itself cause physical harm. However, this screening often leads to a cascade of follow-up testing and surgeries that can cause serious harms, including stroke, heart attack or death. In addition, screening all adults will lead to many false-positive results because few people have carotid artery stenosis. This is when a test result says a person has a condition that he or she actually does not have. False-positive results lead to unneeded tests and surgeries.

The Final Recommendation on Screening for Carotid Artery Stenosis: What Does It Mean?

Here is the Task Force's final recommendation on screening for carotid artery stenosis. It is based on the quality and strength of the evidence about the potential benefits and harms of screening for preventing strokes. It also is based on the size of the potential benefits and harms. Task Force recommendation grades are explained in the box at the end of this fact sheet.

When the Task Force recommends against screening (**Grade D**), it is because it causes more potential harms than benefits. The Notes explain key ideas.

Visit the Task Force Web site to read the full [final recommendation statement](#). The statement explains the evidence the Task Force reviewed and how it decided on the grade. An [evidence document](#) provides more detail about the studies the Task Force reviewed.

1 The Task Force recommends against *screening* for *asymptomatic* carotid artery stenosis in the *general adult population*. **Grade D**

Notes

- 1** *screening*
Conducting an ultrasound test or listening to the neck with a stethoscope.
- asymptomatic*
Without signs or symptoms of a stroke.
- general adult population*
All adults ages 18 and older who do not have a history of stroke or mini-stroke.

Should You Be Screened for Carotid Artery Stenosis?

Getting the best health care means making smart decisions about what screening tests, counseling services, and preventive medicines to get and when to get them. Many people don't get the tests or counseling they need. Others get tests or counseling they don't need or that may be harmful to them.

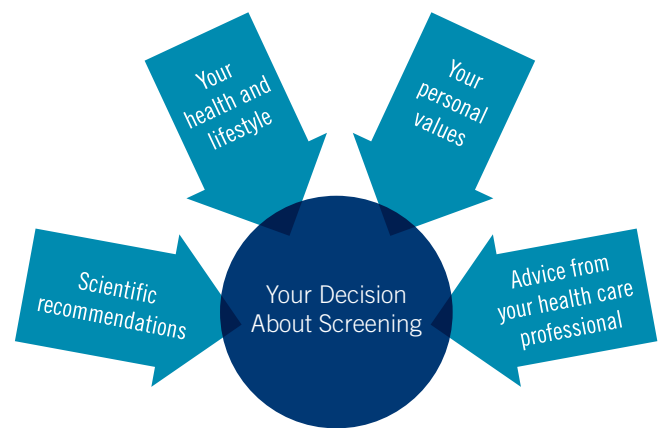
Task Force recommendations can help you learn about screening tests, counseling services, and preventive medicines. These services can keep you healthy and prevent disease. The Task Force recommendations do not cover diagnosis (tests to find out why you are sick) or treatment of disease. Task Force recommendations also apply to some healthcare settings but not others. For example, this recommendation does not apply to people who already have had a stroke.

Deciding Whether to Get Screened for Carotid Artery Stenosis

Consider your own health and lifestyle. Think about your personal beliefs and preferences for health care. And consider scientific recommendations, like this one from the Task Force. If you are concerned about your risk for carotid artery stenosis, talk with your doctor or nurse.

Keeping Your Heart Healthy

You can do many things to reduce your overall risk of developing heart or blood vessel disease. Don't smoke. Eat a healthy diet and stay at a healthy weight. Be physically active. Keep your blood pressure, blood cholesterol, and blood sugar under control.





What is the U.S. Preventive Services Task Force?

The Task Force is an independent group of national experts in prevention and evidence-based medicine. The Task Force works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services such as screenings, counseling services, or preventive medicines. The recommendations apply to people with no signs or symptoms of the disease being discussed.

To develop a recommendation statement, Task Force members consider the best available science and research on a topic. For each topic, the Task Force posts draft documents for public comment, including a draft recommendation statement. All comments are reviewed and considered in developing the **final recommendation statement**. To learn more, visit the [Task Force Web site](#).

Click Here to Learn More About Carotid Artery Stenosis and Stroke

-  **Carotid Artery Disease** (MedlinePlus)
-  **NINDS Stroke Information Page** (National Institute for Neurological Disorders and Stroke)

USPSTF Recommendation Grades	
Grade	Definition
A	Recommended.
B	Recommended.
C	Recommendation depends on the patient's situation.
D	Not recommended.
I statement	There is not enough evidence to make a recommendation.