

Screening for Abdominal Aortic Aneurysm

The U.S. Preventive Services Task Force (Task Force) has issued a **final** recommendation statement on *Screening for Abdominal Aortic Aneurysm*.

This final recommendation statement applies to adults ages 50 and older who do not have signs or symptoms of an abdominal aortic aneurysm (AAA).

The final recommendation statement summarizes what the Task Force learned about the potential benefits and harms of screening for AAA: (1) Men ages 65 to 75 who smoke or have ever smoked

should have a one-time AAA screening; (2) Doctors can consider offering screening to men ages 65 to 75 who have never smoked; (3) Currently, there is not enough evidence to make a recommendation for or against AAA screening in women ages 65 to 75 who smoke or have ever smoked; (4) Women who have never smoked should not get routine AAA screening.

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

What is an abdominal aortic aneurysm?

An abdominal aortic aneurysm (AAA) is a balloon-like bulge in the aorta, which is the large artery that carries oxygen-rich blood away from the heart. The aorta goes through the chest and abdomen (belly). An AAA occurs in the part of the aorta that is in the abdomen.

Facts About Abdominal Aortic Aneurysm

If the wall of the aorta becomes weak, the force of the blood flowing through this artery can make the wall bulge out like a balloon. This bulge, or aneurysm, can grow large and rupture (burst), which causes dangerous bleeding in the body. Most people who have an AAA show no signs or symptoms until it ruptures. A ruptured AAA often leads to death.

Older male smokers have the highest risk of developing an AAA. It is much less common in men who have never smoked and in women who have ever smoked. An “ever smoker” is a person who has smoked at least 100 cigarettes in his or her lifetime. AAA is rare in women who have never smoked.

Screening and Treatment for Abdominal Aortic Aneurysm

AAA screening is done using an ultrasound. This safe and painless test uses sound waves to create a picture of the abdominal aorta. The width of the aorta is measured to find out whether it has a bulge.

Treatment for an AAA depends on the size of the aneurysm. If it is small—less than 5.5 centimeters wide (about 2 inches)—the doctor may suggest repeat screenings every so often to monitor for any changes. Surgery is generally recommended only if the AAA is large—5.5 centimeters or more—or is growing very quickly.

Surgery to repair an AAA can be done in two ways. The most common way is open abdominal surgery, in which a surgeon removes the portion of the aorta with the aneurysm. That portion is replaced with a man-made, cloth-like tube, known as a graft. An AAA also can be repaired through endovascular surgery. In this procedure, the doctor does not remove the aneurysm but inserts a metal tube into that portion of the aorta to strengthen it. The tube, which is called a stent graft, is attached to the aorta and forms a stable channel for blood flow.

Potential Benefits of AAA Screening and Treatment

The Task Force reviewed studies on screening and treatment for AAA. It found that the potential benefits and harms differ for men and women. This is because the chances of developing an AAA and the risk of dying from surgery to repair an AAA are different for men and women.

The Task Force also found that the quality of the evidence showing that screening can prevent AAA ruptures and death is much better for men than for women.

Men ages 65 to 75 who smoke or have ever smoked

AAA is most common in older men who smoke or have ever smoked. For these men, the Task Force found that one-time screening with an ultrasound, along with appropriate treatment, can reduce their risk of dying from a ruptured AAA by about half.

Men 65 to 75 years old who have never smoked

AAA is much less common in nonsmoking men than in men who smoke or have ever smoked. This greatly reduces the chance that a nonsmoking man will benefit from AAA screening.

The Task Force found that screening men ages 65 to 75 who have never smoked will benefit only a few men and will have no effect on most men in this group.

Women ages 65 to 75 who smoke or have ever smoked

AAA also is uncommon in older women who smoke or have ever smoked. However, the Task Force's findings for this group were different than for older men who have never smoked.

The evidence on whether screening reduces the risk of AAA rupture and death is not nearly as good in older women as in older men. Because of the lack of high-quality evidence, the Task Force could not determine whether AAA screening has potential benefits for this group. More research is needed to determine whether or not AAA screening benefits older women who have smoked.

Women who have never smoked

AAA is very rare in women who have never smoked, and the Task Force determined that these women are unlikely to benefit from routine screening.

Potential Harms of Detection and Early Treatment

The Task Force found that finding and treating an AAA has potential harms. People who are screened are about twice as likely to have AAA surgery within 3 to 5 years after screening compared with people who are not screened. The risk of dying from surgery to repair an AAA is higher for women than for men.

The Task Force, therefore, found that the potential harms of detection and early treatment may be higher for women than for men.

The Final Recommendation on Screening for Abdominal Aortic Aneurysm: What Do They Mean?

Here are the Task Force's final recommendations on screening for AAA. They are based on the quality and strength of the evidence about the potential benefits and harms of screening for this purpose. They also are 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 screening (**Grade B**), it is because it has more potential benefits than potential harms. When the evidence shows that a screening test may have at least a small benefit for some individuals, the Task Force gives it a **Grade C**. When the Task Force recommends against screening (**Grade D**), it is because it has more potential harms than potential benefits. When there is not enough evidence to judge benefits and harms, the Task Force does not make a recommendation for or against—it issues an **I Statement**. 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 *one-time screening* for AAA by *ultrasonography* in men ages 65 to 75 years who have ever smoked. **Grade B**
- 2 The Task Force recommends that *clinicians selectively offer* screening for AAA in men ages 65 to 75 years who have never smoked, rather than routinely screening all men in this group. Existing evidence indicates that the net benefit of screening all men ages 65 to 75 years who have never smoked is small. In determining whether this service is appropriate in individual cases, patients and clinicians should *consider the balance of benefits and harms* on the basis of evidence relevant to the patient's medical history, family history, other risk factors, and personal values. **Grade C**
- 3 The Task Force concludes that the current *evidence is insufficient* to assess the balance of benefits and harms of screening for AAA in women ages 65 to 75 years who have ever smoked. **I Statement**
- 4 The Task Force recommends against *routine screening* for AAA in women who have never smoked. **Grade D**

Notes

- 1 *one-time screening*
Screening only once and not repeated on a regular basis.
- ultrasonography*
A test with ultrasound. Ultrasound uses sound waves to create a picture of internal organs.
- 2 *clinicians*
Health care professionals, including doctors, nurse practitioners, physician assistants, and nurses.
- selectively offer*
Decide whether screening is right for a patient on an individual basis.
- consider the balance...*
Consider the size and strength of the potential benefits and harms to determine whether screening is right for the patient.
- 3 *evidence is insufficient*
The Task Force did not find enough information in the studies to determine the potential effectiveness of AAA screening in this group of older women. It also was not clear whether there were more benefits than harms of screening in this group.
- 4 *routine screening*
Screening all women in this population.

Should You Be Screened for for Aortic Abdominal Aneurysm?

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 been diagnosed with an AAA.

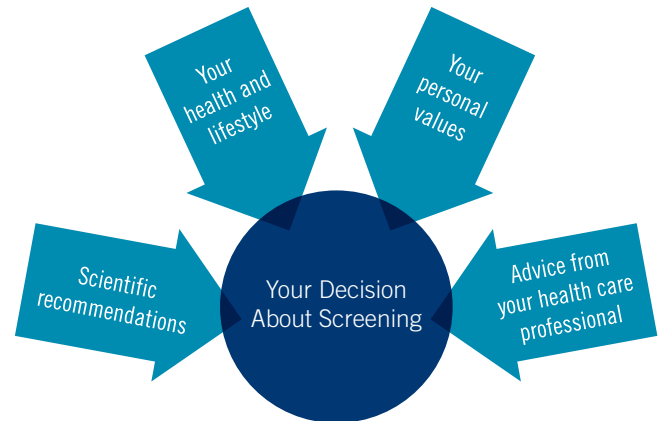
Deciding Whether to Get Screened for AAA

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 AAA, talk with your doctor or nurse, especially if you are a smoker or smoked earlier in your life. You may also be at increased risk for AAA if your parent, sibling, or child has had an AAA. Other risk factors for AAA include heart disease, high blood pressure, and obesity. If you do get an AAA screening test, talk with your doctor or nurse about the results of the test and next steps you may need to take.

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](#).

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.

Click Here to Learn More About Abdominal Aortic Aneurysm

-  **Talk to Your Doctor About Abdominal Aortic Aneurysm** (healthfinder.gov)
-  **Aortic Aneurysm** (MedlinePlus)
-  **Aneurysm** (National Heart, Lung, and Blood Institute)
-  **Talk with Your Health Care Provider About Screening for Abdominal Aortic Aneurysm** (Agency for Healthcare Research and Quality)