This fact sheet explains the U.S. Preventive Services Task Force's (Task Force) draft recommendation statement on screening for abdominal aortic aneurysm. It also tells you how you can send comments about the draft recommendation to the Task Force. Comments may be submitted from June 18, 2019, to July 15, 2019. The Task Force welcomes your comments.

Screening for Abdominal Aortic Aneurysm

The Task Force issued a draft recommendation statement on Screening for Abdominal Aortic Aneurysm. Screening for abdominal aortic aneurysm (AAA) with an ultrasound and getting appropriate follow-up treatment can prevent the aneurysm from rupturing (bursting), which can be deadly. The decision about whether a person should be screened for AAA depends on age, sex, smoking status, and family history.

- Older men who smoke or used to smoke benefit the most and should get screening.
- The decision about screening older men who have never smoked should be an individual one, based on other risk factors.
- Women who have never smoked and do not have a family history of AAA should not be screened.
- There’s not enough evidence to say whether or not it’s useful to screen older women who smoke or used to smoke, or who have a family history of AAA.

This recommendation applies to adults who do not have signs or symptoms of AAA.

AAA is a bulge or “ballooning” in the wall of the main artery that carries blood from the heart to the body (known as the aorta). AAA occurs in the part of the aorta that runs through the abdomen, or belly. AAA often has no signs or symptoms, and the aneurysms can burst, or rupture, without warning, which can be deadly.

Facts about Abdominal Aortic Aneurysm

The aorta is the main artery that carries blood from the heart to the body. 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 or burst, which causes dangerous bleeding in the body. A burst aneurysm can lead to death.

People most at risk for AAA include smokers, men, older adults, and those with a family history of the condition.

AAAs often grow slowly and usually don’t have signs or symptoms. If they do get bigger, signs and symptoms can include a pulsating feeling near the belly button; deep, constant pain in the abdomen; or back pain. If someone has symptoms of growing AAA, they should see a doctor. If AAAs burst, they can lead to life-threatening internal bleeding. Sudden, severe pain in the back or belly can mean that the aneurysm has burst, so it is essential that an individual seek immediate medical help.

Screening and Treatment for Abdominal Aortic Aneurysm

The recommended way to screen for AAA is using an ultrasound of the abdomen. 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 AAA depends on the size of the aneurysm. If it is small — about 1-2 inches wide — repeat ultrasounds may be needed to watch for any changes. Surgery is generally only done if an aneurysm is large — 2 inches or bigger — or is growing very quickly.
There are two types of surgeries to treat, or repair, AAAs. One option is called endovascular aneurysm repair (EVAR). In this procedure, a stent is placed in the damaged part of the aorta using a tube (catheter) through a large artery in the leg. A stent is a fabric and metal tube which helps to strengthen the artery wall and prevent rupture.

Open surgery is the other way to repair AAA. This surgery requires opening the abdomen to place a fabric tube in the damaged section of the aorta.

**Potential Benefits and Harms of Abdominal Aortic Aneurysm Screening and Treatment**

The Task Force reviewed the evidence on benefits and harms of screening and treatment for AAA.

The main benefit of screening for AAA is to find and treat aneurysms before they burst. How much individuals benefit from screening depends on age, sex, smoking status, and family history.

While screening for AAA can be lifesaving, just like any procedure, it can also lead to harms. Screening can find aneurysms that would never have grown or ruptured, leading to unnecessary surgeries that can be harmful and potentially cause death. Other complications of surgery include lung problems, heart damage, kidney damage, stroke, bleeding, leaking (holes or damage in the stent), or more surgery. Because of the potentially serious harms of treatment, it is important only to screen people for whom the benefits outweigh the harms.

Older men who have smoked get the most benefit from screening. Women who have never smoked or don’t have a family history of AAA should not be screened because the harms outweigh the benefits. The evidence isn’t clear about the benefits and harms of screening in older women who smoke or used to smoke, or who have a family history.

**The Draft Recommendations on Screening for Abdominal Aortic Aneurysm: What Do They Mean?**

Here are the Task Force’s draft 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 are also 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 issues a **B Grade**, it recommends screening because it has more potential benefits than harms. When the Task Force issues a **C Grade**, a screening test may have benefit for some individuals, but the balance of potential benefits and harms is close. When the Task Force issues a **D Grade**, it recommends against screening because the harms outweigh the benefits. An **I Statement** means that there is not enough evidence to recommend for or against screening.

Before you send comments to the Task Force, you may want to read the **draft recommendation statement**. The recommendation statement explains the evidence the Task Force reviewed and how it decided on the grade. An **evidence document** provides more detail about the scientific studies the Task Force reviewed.
Comment Period from June 18, 2019 to July 15, 2019

1. The USPSTF recommends one-time screening for abdominal aortic aneurysm (AAA) with ultrasonography in men aged 65 to 75 years who have ever smoked. (B Grade)

2. The USPSTF recommends that clinicians selectively offer screening for AAA in men aged 65 to 75 years who have never smoked rather than routinely screening all men in this group. Evidence indicates that the net benefit of screening all men aged 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. (C Grade)

3. The USPSTF recommends against routine screening for AAA in women who have never smoked and have no family history. (D Grade)

4. The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for AAA in women aged 65 to 75 years who have ever smoked or have a family history. (I Statement)

Notes

1. one-time screening
   Screening only once and not repeating on a regular basis.

2. abdominal aortic aneurysm
   A bulge or “ballooning” in the wall of the main artery that carries blood from the heart to the body.

3. ultrasonography
   A painless screening test (ultrasound) that uses sound waves to measure the width of the abdominal aorta and determine if AAA is present.

4. ever smoked
   Someone who has ever smoked has smoked 100 cigarettes or more in their lifetime (includes current and former smokers).

5. selectively offer
   Decide whether screening is right for a patient on an individual basis.

6. family history
   For AAA, having a family history of the disease means having a parent, brother, or sister (first-degree relative) who had AAA.

7. routine screening
   Screening all people in a specific population.

8. current evidence is insufficient
   The Task Force did not find enough information to make a recommendation for or against screening for this population.
What is the U.S. Preventive Services Task Force?

The Task Force is an independent, volunteer 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, and 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.

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<th>Grade</th>
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<td>A</td>
<td>Recommended.</td>
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<td>B</td>
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<tr>
<td>C</td>
<td>Recommendation depends on the patient’s situation.</td>
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<td>D</td>
<td>Not recommended.</td>
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<tr>
<td>I statement</td>
<td>There is not enough evidence to make a recommendation.</td>
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Click Here to Learn More about Abdominal Aortic Aneurysm

- **Aortic Aneurysm Fact Sheet**
  (Centers for Disease Control and Prevention)
- **Aortic Aneurysm**
  (National Heart, Lung, and Blood Institute)
- **Abdominal Aortic Aneurysm**
  (Healthfinder.gov)

Click Here to Comment on the Draft Recommendation

The Task Force welcomes comments on this draft recommendation. Comments must be received between June 18, 2019 and July 15, 2019. All comments will be considered for use in writing final recommendations.