# Understanding Task Force Draft Recommendations

U.S. Preventive Services TASK FORCE

This fact sheet explains the U.S. Preventive Services Task Force's (Task Force) draft recommendation statement on risk assessment for cardiovascular disease (CVD) with nontraditional risk factors. It also tells you how you can send comments about the draft recommendation to the Task Force. Comments may be submitted from January 16, 2018 to February 12, 2018. The Task Force welcomes your comments.

## Risk Assessment for Cardiovascular Disease With Nontraditional Risk Factors

The Task Force has issued a **draft recommendation statement** on *Risk Assessment for Cardiovascular Disease With Nontraditional Risk Factors*. The Task Force reviewed whether adding three nontraditional risk factors, in addition to the traditional risk factors for CVD, can better assess risk for heart attack or stroke.

The Task Force found that there is not enough evidence to recommend for or against using three nontraditional risk factors, in addition to traditional risk factors, to help prevent heart attack or stroke.

This draft recommendation applies to adults with no history or signs and symptoms of CVD.

### What is cardiovascular disease?

Cardiovascular disease (CVD), also commonly called heart disease, refers to diseases of the heart and blood vessels.

CVD can limit blood flow and lead to dangerous cardiovascular events such as heart attacks and strokes.

### What are traditional and nontraditional risk factors?

Clinicians assess several risk factors to determine risk for heart attack and stroke. Examples include age, sex, smoking, diabetes, and cholesterol. These are traditional risk factors.

Nontraditional risk factors are additional things that clinicians may assess to help determine risk for heart attack and stroke. Examples include blood pressure using readings from the arm and leg, the amount of calcium in the arteries, and the amount of a certain protein in the blood.

## Facts about CVD, the Ankle-Brachial Index, Coronary Artery Calcium, and High-Sensitivity C-Reactive Protein

CVD is the leading cause of death for all adults in the United States. It can limit blood flow and lead to heart attacks or strokes.

A heart attack happens when the flow of blood to a section of heart muscle suddenly becomes blocked and the heart can't get oxygen. A stroke occurs if the flow of blood to a part of the brain is blocked.

There are several traditional risk factors that increase risk of CVD, heart attack, and stroke. Clinicians check for someone's risk for CVD by using these traditional risk factors

- Older age,
- Male sex,
- Race/Ethnicity,
- High blood pressure,
- Smoking,
- High cholesterol, and
- Diabetes.

The Task Force looked at the evidence to see whether checking three additional, nontraditional, risk factors would help clinicians better assess risk and help to prevent heart attack and stroke. These nontraditional risk factors include:

- An abnormal blood pressure ratio, based on blood pressure readings from both the ankle and the arm. This ratio, known as the Ankle-Brachial Index (ABI), determines risk of blocked blood vessels in the leg which can also be associated with increased risk for CVD, heart attack and stroke.
- An elevated amount of calcium in the coronary arteries, which are blood vessels that provide oxygen-rich blood to the heart. This build-up can increase CVD risk. The amount of calcium build-up is the Coronary Artery Calcium (CAC) score, which is measured using a type of x-ray.
- An elevated amount of a specific protein in the blood that is an indicator of increased CVD risk. The amount of the protein, called C-reactive protein (CRP), is measured using a blood test called high-sensitivity CRP (hsCRP).

## Potential Benefits and Harms of Screening for CVD with ABI, CAC, and hsCRP to Prevent Heart Attack and Stroke

There is some evidence that ABI, CAC, and hsCRP tests can slightly improve the ability to predict the risk of CVD, heart attack, and stroke. But, the amount of that improvement is not large or precise enough to help clinicians make better treatment or care decisions with their patients. More research is needed to determine if adding these three nontraditional risk factors to traditional risk factors can help predict and prevent heart attack or stroke.

The harms of screening with ABI and hsCRP tests are minimal. The main harm of determining someone's CAC score is exposure to low-dose radiation from the x-ray.

There are larger potential harms from other procedures that may be done if someone has an abnormal result. These procedures may include:

- Angiograms, a type of x-ray of the blood vessels, can cause heart rate changes, stroke, heart attack, or death. People can also be allergic to the contrast dye used during the test.
- Angioplasty, a procedure that reduces blockages in blood vessels, can lead to heart attack, a tear to a blood vessel, bleeding, kidney failure, or death.

## The Draft Recommendation on Risk Assessment for Cardiovascular Disease With Nontraditional Risk Factors: What Does It Mean?

Here is the Task Force's draft recommendation on screening for CVD using nontraditional risk factors. It is based on the quality and strength of the evidence about the potential benefits and harms of screening for CVD using ABI, CAC, or hsCRP. It is 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 there is not enough evidence to judge benefits and harms, the Task Force does not make a recommendation for or against screening and instead issues an **I Statement**.

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.

1 The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of adding ankle-brachial index (ABI), high-sensitivity C-reactive protein (hsCRP), or coronary artery calcification (CAC) score to traditional risk assessment for cardiovascular disease (CVD) to screen asymptomatic adults to prevent CVD events. **(I Statement)**

## Notes

1 **ankle-brachial index (ABI)**
A way of taking the blood pressure using readings from both the ankle and the arm. It compares these readings to determine a score. A low ABI score can indicate increased risk for CVD, heart attack, stroke, and blood vessel blockage in the legs.

**High-sensitivity C-reactive protein (hsCRP)**
hsCRP is a test that measures the amount of C-reactive protein (CRP) in the blood. Higher levels of CRP in the blood are an indicator of increased risk for CVD, heart attack, and stroke.

**Coronary artery calcification (CAC) score**
A CAC score measures the build-up of calcium in the walls of the coronary arteries, blood vessels that provide oxygen-rich blood to the heart. A higher score indicates more coronary artery calcification which can increase risk for CVD, heart attack, and stroke.

**traditional risk assessment for cardiovascular disease (CVD)**
Ways of measuring risk of CVD, heart attack, and stroke using traditional risk factors including age, sex, smoking status, cholesterol, blood pressure, race/ethnicity, and diabetes.

**Asymptomatic**
Having no signs or symptoms of CVD, heart attack, or stroke.

**CVD or CVD events**
CVD can limit blood flow and lead to events such as heart attacks and strokes.

## 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**.

**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 CVD, Heart Attack, and Stroke**

- **Heart Diseases** (MedlinePlus)
- **Heart Disease Facts** (Centers for Disease Control and Prevention)
- **What is a Heart Attack?** (National Heart, Lung, and Blood Institute)
- **What is a Stroke?** (National Heart, Lung, and Blood Institute)

**Click Here** to Comment on the Draft Recommendation

The Task Force welcomes comments on this draft recommendation.


Comments must be received between January 16, 2018 and February 12, 2018.

All comments will be considered for use in writing final recommendations.