

Aspirin Use for the Primary Prevention of Cardiovascular Disease and Colorectal Cancer

The U.S. Preventive Services Task Force (Task Force) has issued a **final recommendation statement** on *Aspirin Use for the Primary Prevention of Cardiovascular Disease and Colorectal Cancer*. The Task Force found that taking a low-dose aspirin can help prevent cardiovascular disease (CVD) and colorectal cancer (CRC) in some adults, depending on age and risk factors.

This final recommendation statement applies to adults 40 years and older who have not been diagnosed with CVD (including having a previous heart attack or stroke) and who do not have an increased risk of bleeding.

The Task Force looked at the benefits and harms of taking aspirin for the primary prevention of both CVD and CRC. Primary prevention aims to prevent a disease before any signs or symptoms appear.

What is cardiovascular disease?

Cardiovascular disease (CVD) describes a range of conditions that involve narrowed or blocked blood vessels and can lead to a heart attack and stroke.

What is colorectal cancer?

Colorectal cancer (CRC) is cancer that starts in the colon or rectum. The colon and rectum are parts of the large intestine, a part of the body's digestive system.

What is aspirin?

Aspirin is an over-the-counter medicine used to relieve pain, fever, swelling, and helps prevent blood from clotting.

The final recommendation statement summarizes what the Task Force recommends:

- Most adults ages 50 to 59 who are at increased risk of CVD should start to take a low-dose aspirin every day, after consulting with their primary care clinician.
- Adults ages 60 to 69 who are at increased risk of CVD should make a decision with their primary care clinician about whether to start to take a low-dose aspirin every day.
- There is not enough available evidence on the benefits and harms of aspirin use in adults younger than age 50 and those 70 or older to recommend for or against its use in preventing CVD and CRC.

Facts about Cardiovascular Disease and Colorectal Cancer

CVD and cancer are the leading causes of death for adults in the United States. In fact, in 2011, more than half of all deaths in the United States were caused by CVD or cancer. CRC is the third most commonly diagnosed cancer in men and women and is a leading cause of cancer death.

A person's risk for CVD can be assessed based on a number of factors, including age, sex, race, total cholesterol, high-density lipoprotein (HDL) cholesterol level, and blood pressure. CVD risk is also influenced by whether a person has diabetes, smokes, or takes blood pressure medication. Calculators are available to help primary care clinicians assess this risk.

Everyone can reduce their risk of CVD and CRC by quitting smoking, eating a healthy diet, and being physically active. Keeping blood pressure and cholesterol under control also can help prevent CVD. In addition, regular screening is an important part of preventing CRC.

Benefits and Harms of Aspirin to Prevent Cardiovascular Disease and Colorectal Cancer

The Task Force looked at the combined benefits and harms of taking aspirin for the primary prevention of both CVD and CRC. They found that aspirin can help prevent heart attacks and strokes in adults ages 50 to 69 who are at increased risk of CVD but who do not have an increased risk of bleeding. A person's risk of bleeding can be determined by their clinician, based on age, sex, other health conditions, current medications, and any previous bleeding problems.

The Task Force also found that taking aspirin for 5 to 10 years can reduce the likelihood of developing CRC. However, the benefits of taking aspirin for primary prevention outweigh the harms only for people who are at increased risk for CVD. The Task Force does not recommend that people who are at increased risk for CRC but not CVD start taking aspirin.

The Task Force found that aspirin use can have harms. It can increase the likelihood of bleeding in the stomach and intestines and of strokes caused by bleeding in the brain. These harms are likely to be small in adults ages 50 to 59, but can be greater in adults ages 60 to 69 because the likelihood of bleeding increases as people get older.

The Task Force also looked for studies on possible benefits and harms of aspirin in adults younger than 50 and older than 70 but did not find enough evidence to make a recommendation for these age groups.

The Final Recommendation on Aspirin to Prevent Cardiovascular Disease and Cancer: What Do They Mean?

Here are the Task Force's final recommendations on aspirin to prevent CVD and CRC. Recommendation statements have letter grades. The grades 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 makes a **Grade B** recommendation for the use of a preventive medicine, it is because it has more potential benefits than potential harms. When the evidence shows that a preventive medicine may have at least a small benefit for some individuals, the Task Force gives it a **Grade C**. 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 documents](#) provides more detail about the studies the Task Force reviewed.

- 1 The Task Force recommends **initiating low-dose aspirin** use for the **primary prevention** of cardiovascular disease (CVD) and colorectal cancer (CRC) in adults aged 50 to 59 years who have a **10% or greater 10-year CVD risk**, are not at increased risk for bleeding, have a **life expectancy of at least 10 years**, and are willing to take low-dose aspirin daily for at least 10 years. **Grade B**
- 2 The decision to initiate low-dose aspirin for the primary prevention of CVD and CRC in adults aged 60 to 69 years who have a greater than 10% 10-year CVD risk should be an individual one. Persons who are not at increased risk for bleeding, have a life expectancy of at least 10 years, and are willing to take low-dose aspirin daily for at least 10 years are more likely to benefit. Persons who place a **higher value** on the potential benefits than the potential harms may choose to initiate low-dose aspirin. **Grade C**
- 3 The **current evidence is insufficient** to assess the balance of benefits and harms of initiating aspirin use for the primary prevention of CVD and CRC in adults younger than age 50 years. **I Statement**
- 4 The current evidence is insufficient to assess the balance of benefits and harms of initiating aspirin use for the primary prevention of CVD and CRC in adults age 70 years and older. **I Statement**

Notes

- 1 **Initiating Starting low-dose aspirin**
Aspirin in an 81-milligram dose. Also called baby aspirin.
primary prevention
Action to prevent a disease (for example, a first heart attack) from occurring in the first place.
10% or greater 10-year CVD risk
Having a 1 in 10 chance of developing CVD within the next 10 years.
life expectancy of at least 10 years
Being likely to live another 10 years.
- 2 **higher value**
People who feel the potential benefits of daily aspirin use are more important to them than the potential harms.
- 3 **current evidence is insufficient**
The Task Force did not find enough evidence in this age group to make a recommendation for or against using aspirin.

Talking with Your Doctor About Starting Low-Dose Aspirin

Getting the best health care means making smart decisions about screening tests, counseling services, and preventive medicines. Many people don't get the tests or take the medications they need. Others get tests or take medications 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 and your family healthy and prevent disease.



Aspirin is available over-the-counter without a prescription; however, you should talk to your primary care clinician before starting to take aspirin. This is important because there are serious harms related to taking aspirin and the benefits and harms depend on your age and risk factors. Make sure your questions and concerns are answered. Consider your health and lifestyle. Think about your preferences for health care and how you feel about taking a pill every day for at least the next five years. Also, consider scientific recommendations, like this one from the Task Force.

And remember, aspirin is just one part of CVD and CRC prevention, which also includes healthy lifestyle and recommended screenings.

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.

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 Cardiovascular Disease and Colorectal Cancer

What is Coronary Heart Disease?

(National Heart, Lung, and Blood Institute)

What is a Stroke?

(National Heart, Lung, and Blood Institute)

Million Hearts Campaign: Prevention

(Centers for Disease Control and Prevention)

Colorectal Cancer

(National Cancer Institute)

Colorectal (Colon) Cancer

(Centers for Disease Control and Prevention)