Should I Get a Coronary CT Scan?

A coronary computed tomography (CT) scan is a high-resolution picture of your heart and the blood vessels that supply it (called the coronary arteries).

There are 2 different types of coronary CT scans: a coronary CT angiogram and a coronary artery calcium scan. Both tests take place inside a standard CT scan machine, but there are important differences between them.

What Are the Potential Benefits of a Coronary CT Scan?

A coronary CT angiogram can tell you if there are any blockages from plaque in your coronary arteries. Plaque is a complex substance made of cholesterol, calcium, and other materials that can build up in arteries over years. A coronary artery calcium scan measures the calcium in the lining of your coronary arteries, called the coronary artery calcium score. It does not tell you if your arteries are blocked.

What Are the Potential Harms of a Coronary CT Scan?

- Increased Worry: Plaque and coronary calcium occur in many healthy people who will never have a heart attack. Discovering that you have plaque or calcium has been associated with increased worry and more treatments without proven benefit. For these reasons, the tests are not routinely recommended for people without symptoms who want to know their risk of heart disease. Scans also sometimes detect unrelated findings, which can lead to unnecessary testing and procedures.
- Overtreatment and Overtesting: When people with symptoms of heart disease received a coronary CT angiogram instead of a traditional cardiac stress test, they were more likely to receive new medications and invasive procedures. These extra treatments did not significantly reduce the rates of death.
- Radiation Exposure: A coronary CT scan exposes you to relatively high levels of radiation. Repeated exposure to radiation has been linked to negative health effects including increased cancer risk.
- Dye Reaction: Rarely, people have a bad reaction to the chemical dye used in an angiogram.
- Extra Cost: Coronary CT scans are not always covered by insurance, leading to high out-of-pocket costs.

What Are Some Alternative Choices to Coronary CT Scan?

The best way to prevent a heart attack is through lifestyle. Avoiding tobacco, maintaining a healthy diet and normal weight, being physically active, and treating existing diabetes and high blood pressure are recommended for everyone, regardless of their risk of heart disease. For most people, a coronary CT scan will not change recommendations or treatment. Furthermore, coronary calcium is not changed

### Coronary computed tomography (CT) scans

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<tr>
<th>Coronary CT angiogram</th>
<th>Coronary artery calcium scan</th>
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<tr>
<td>What does the test do?</td>
<td>Visualizes blockages in the coronary arteries</td>
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<td>How is the test performed?</td>
<td>Requires an intravenous chemical dye</td>
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<td>Who might consider this test?</td>
<td>Certain people with typical symptoms of heart disease such as chest pain with activity</td>
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<td>How does the test compare with more established testing methods?</td>
<td>Cardiac stress testing is equally effective at preventing death from heart attack with fewer unnecessary medications and procedures.</td>
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<td>What information is not available from these tests?</td>
<td>Neither test can identify specific ways to lower the chance of having a heart attack.</td>
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by lifestyle or medications. There are several reliable risk scores that use a combination of smoking status, blood pressure, cholesterol, age, and other risk factors to predict your risk of heart attack or stroke (https://framinghamheartstudy.org/fhs-risk-functions/cardiovascular-disease-10-year-risk/). Cardiac stress testing is a more informative first test for people with chest pains suspicious for heart disease.

What Should I Know About Independent Heart Scan Clinics?

Many community clinics advertise coronary artery calcium scans, also known as heart scans, to assess the risk of heart attack. There is no evidence that these scans provide any benefit, and they are of questionable quality.

### FOR MORE INFORMATION


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