

**Choosing Wisely Canada** is a campaign to help physicians and patients engage in conversations about unnecessary tests, treatments and procedures, and to help physicians and patients make smart and effective choices to ensure high-quality care.

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## Heart imaging tests before surgery

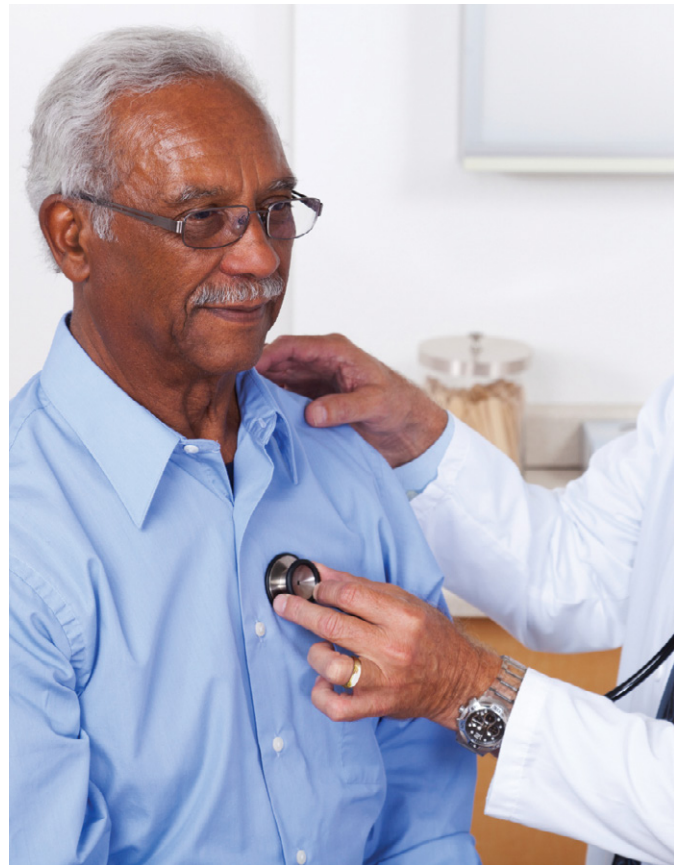
When you need them—and when you don't

If you're having surgery, you may wonder if you need an imaging test of your heart to make sure it is safe for you to have the surgery. The answer: Probably not. The imaging tests usually don't help unless you are having heart surgery or have symptoms or risk factors for heart disease.

### **The tests aren't needed before most surgery.**

A variety of imaging tests may be used to examine the heart. Echocardiography uses sound waves to take pictures of the heart. Nuclear cardiology tests use a small amount of radioactive material to show the blood flow to the heart. A cardiac CT scan, also used sometimes, uses X-rays to look at the blood vessels and structure of the heart.

These tests can show if you're at risk of having a heart attack or another serious problem during surgery. The tests may show that you need special care during or after surgery. Or you may need to delay surgery until the problem is treated, or have a different kind of surgery.



But if you have minor surgery, the risk of heart problems is very low. Minor surgeries include any “same-day” surgery, such as breast biopsy, eye, or skin surgery. There isn't much more doctors can do to lower the risk. And having a heart-imaging test is not likely to lower your risk.

In fact, even major surgery is safe for most healthy people who feel well, are moderately physically active, and do not have symptoms of heart disease. In this case, usually all you need before surgery is a careful medical history and physical exam.

### **Heart imaging tests have risks.**

The tests are usually safe, and some can be done with little or no radiation. But if your risk of having a heart problem is low, the tests can produce false-positive results. This can cause anxiety and lead to more tests and delay of your surgery. For example, you might have a follow-up coronary angiography, which exposes you to more risks and radiation. The risks are low, but exposure to radiation adds up over your lifetime, so it's best to avoid X-rays whenever you can.

### **When are imaging tests needed before surgery?**

You may need an imaging test before surgery if:

- You have a known heart condition, such as coronary artery disease or heart failure.
- You have possible symptoms of heart disease, such as chest pain or trouble breathing.
- You are going to have some kind of major surgery, such as a knee or hip replacement.
- You are going to have a major surgery, such as bypass surgery for a blocked artery in your leg, and you have both of these other risks:
  - You have diabetes or kidney disease, or a history of coronary artery disease, heart failure, or stroke.
  - You cannot walk a short distance or climb stairs without having pain or shortness of breath.

