
Echocardiogram Before Surgery: When you need it—and when you don't



If you're having surgery, you may wonder if you need an echocardiogram first. Some people have this test to make sure it is safe for them to have surgery.

An echocardiogram uses sound waves (ultrasound) to make a moving picture of the heart. It shows if your heart has a problem pumping blood. And it can help determine if you are at risk for a heart attack or heart failure.

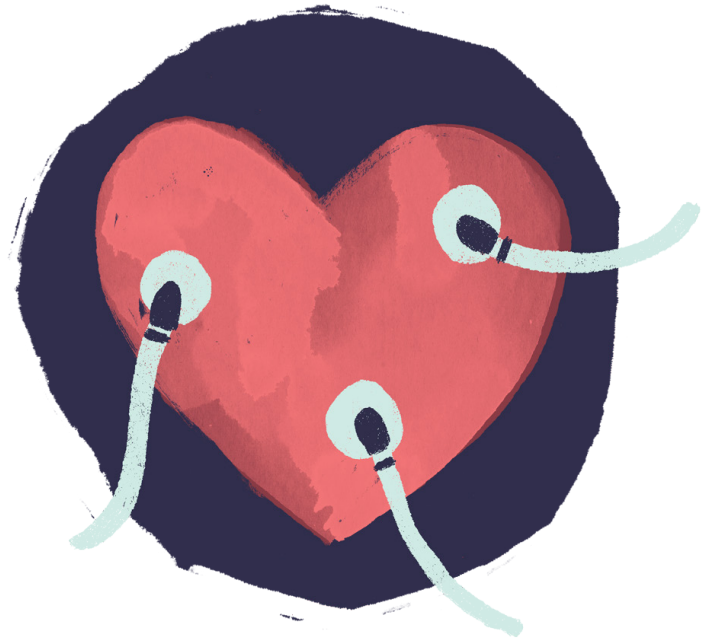
The test is a safe and non-invasive way to see how well your heart is working. If your health care provider thinks you might have heart disease, the test can be a good idea. But often the test is not needed. Here's why:

The test usually isn't necessary if you don't have symptoms.

People without symptoms rarely have pumping problems. You usually don't need the test if you haven't had heart disease, you don't have symptoms and your heart sounds normal when your health care provider listens with a stethoscope. An echocardiogram probably won't find a problem that would affect your surgery.

An echocardiogram can lead to other tests.

A standard echocardiogram is very safe. It does not use radiation or have side effects. But the test can cause a false alarm. This can lead to anxiety, more tests, unnecessary medicines, or delayed surgery. For example, if something looks wrong on the test, your health care provider might order another test, called a nuclear stress test which can expose you to radiation.



Some people get a stress echocardiogram, where images are taken before and after using a treadmill. In this case, a false alarm can lead to a coronary angiogram (cardiac catheterization) to detect blockages in the heart arteries. This is an invasive test where a tube called a catheter is put into your heart through an artery in your leg or arm. A coronary angiogram would expose you to radiation and includes risks that can cause a heart attack, stroke and even death.

When should you have an echocardiogram before surgery?

You may need an echocardiogram before surgery if:

- You have a serious heart condition, such as uncontrolled heart failure, irregular heartbeats (arrhythmias), or significant valve disease.

- You have symptoms of heart disease, such as chest pain or shortness of breath.
- You get tired or out of breath more easily than you did in the past.

In these cases, your health care provider can use the echocardiogram to check your risks. The test can show if your health care provider should change or postpone your surgery.

About Choosing Wisely Canada

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

How this pamphlet was created:

This pamphlet was adapted with permission from a similar pamphlet used in the US Choosing Wisely campaign, organized by the ABIM Foundation. Modifications were made to ensure relevance for a Canadian audience. The Canadian reviewer of this pamphlet was the Canadian Cardiovascular Society.

This pamphlet is for you to use when talking with your health care provider. It is not a substitute for medical advice and treatment. Use of this pamphlet is at your own risk.

How should you prepare for surgery?

Your health care provider or the hospital's pre-surgery team will examine you and review your medical history.

- If they order any tests, ask why.
- Ask your health care provider to check your test records for the past four to six months. Usually you don't need to repeat a recent test if your condition hasn't changed.
- Bring a list of the names and doses for all your medicines, vitamins and supplements.
- Report any new symptoms that could be warning signs of heart disease—even if they happen after your exam.

These steps can help make your surgery safer:

Quit smoking, at least for the surgery. The sooner you quit, the lower your risk of complications. It is very important not to smoke on the day of your surgery. If you need help stopping, ask your health care provider.

Ask your health care provider about your blood counts. If your red blood cell counts are low, ask your health care provider about whether simple treatments like iron can be used to boost your red blood cells for surgery. That way, you can reduce the risk of needing a blood transfusion.

Ask which pain medicines you can take. Ask your health care provider if you should stop aspirin or other blood thinners.

- If you need pain relief, you may want to use acetaminophen (Tylenol and generic).
- Avoid ibuprofen (Advil, Motrin IB, and generic) or similar anti-inflammatory drugs. In doubt, ask your health care provider. These agents may cause bleeding.

Ask for help. Ask someone to drive you to and from the hospital or to stay there overnight with you. Ask about nursing or rehab care, too.

Pack a bag and bring:

- Provincial health card and hospital card.
- Storage containers for dentures, contact lenses, and eyeglasses.
- A few items for comfort, such as a music player and headphones, photos, a robe.
- Do not bring jewelry and other valuables.
- If you came alone, bring names and telephone contacts of family members or friends that your health care provider may speak to if necessary.