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## ECG (Electrocardiogram): When you need it—and when you don't



An ECG (electrocardiogram) records the electrical activity of your heart at rest. It provides information about your heart rate and rhythm, and shows if there is enlargement of the heart due to high blood pressure (hypertension) or evidence of a previous heart attack (myocardial infarction). However, it does not show whether you have asymptomatic blockages in your heart arteries or predict your risk of a future heart attack. The resting ECG is different from a stress or exercise ECG or cardiac imaging test.

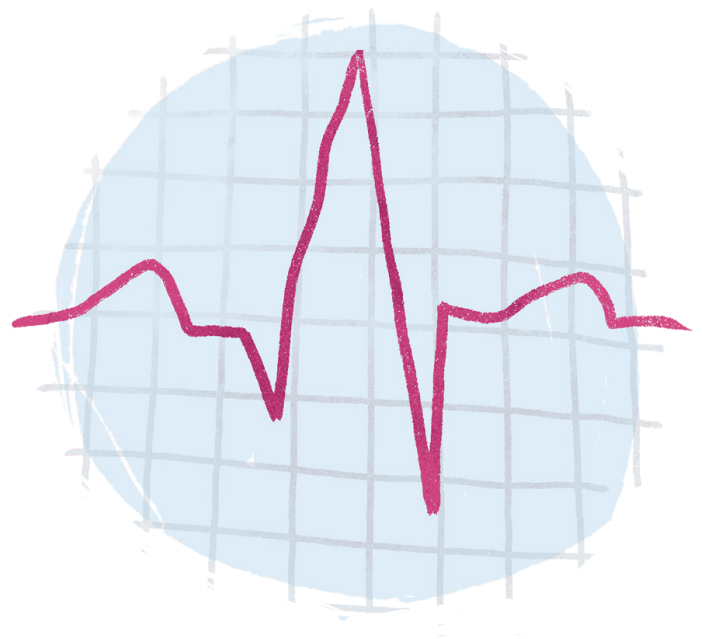
You may need an ECG test if you have risk factors for heart disease such as high blood pressure, or symptoms such as palpitations or chest pain. Or you may need it if you already have heart disease. But in other cases, you may think twice about having this test. Here's why:

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### **Usually, you do not need an ECG if you don't have risk factors for heart disease or symptoms that suggest possible heart disease.**

The test is not useful in routine checkups for people who do not have risk factors for heart disease such as high blood pressure or symptoms of heart disease, like chest pain.

Yet, many people with no risk factors or symptoms have an ECG as part of their routine checkups. There are better ways to prevent heart disease than routine ECGs. The ECG will not harm you. However, it can sometimes show mild nonspecific abnormalities that are not due



to underlying heart disease, but cause worry and lead to follow-up tests and treatments that you do not need.

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### **When are ECGs needed?**

In some cases, it can be important to get this test. You should probably have an ECG if you have risk factors for an enlarged heart such as high blood pressure or symptoms of heart disease, such as chest pain, shortness of breath, an irregular heartbeat or heavy heartbeats. You may need the test for screening or occupational requirements, or if you have a personal or family history of heart disease, diabetes or other risks and you want to start exercising.

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## How can I help myself get better?

These steps can help protect your heart, whether you have heart disease or just want to prevent it.

**Know your risks.** Talk to your health care provider. Your risk of heart disease depends on many things, such as your age, sex, ethnicity, cholesterol, blood pressure, and if you smoke or have diabetes. Use the risk assessment test at [www.heartandstroke.ca/ehealth](http://www.heartandstroke.ca/ehealth).

**Lower your risks.** The best ways to lower your risk of heart disease are to:

- Be aware of your risk factors.
- Be smoke-free.
- Be physically active.
- Know and control your blood pressure.
- Eat a healthy diet that is high in fibre, lower in fat, especially saturated and trans fats, lower in sodium, includes lots of fruit and vegetables, and includes portions of food that are in line with your level of physical activity.
- Achieve and maintain a healthy weight.
- Manage your diabetes.
- Limit alcohol use.
- Reduce stress.
- Visit your health care provider regularly and follow your health care provider's advice.
- Know and control your blood cholesterol.

**Have your blood pressure, blood cholesterol, and blood sugar tested according to your health care provider's recommendations.** These tests are proven to help measure your risk of having heart disease.

**Blood pressure.** You should be tested at least once a year using a blood-pressure cuff. If you

have been diagnosed with high blood pressure (or other related conditions), your health care provider will recommend that your blood pressure be checked more often. Be sure to ask your health care provider how often you should have your blood pressure checked.

**Cholesterol.** You should have a blood test for cholesterol if you are a male and over 40, female and over 50 or post-menopausal, you have heart disease, stroke, diabetes or high blood pressure, your waist measures more than 102 cm (40 in) for men or 88 cm (35 in) for women, you have a family history of heart disease or stroke. Your health care provider can advise how often you should have your cholesterol tested.

**Blood sugar.** If you're over 40, you should have a blood test once every three years to measure your blood sugar (glucose). Too much glucose can harm your blood vessels.

If you have risk factors for diabetes or are pregnant, your blood sugar levels should be tested. Speak to your health care provider about whether you need a blood sugar test.

If your blood pressure, blood cholesterol, or blood sugar are too high, work with your health care provider to lower them. Most people can lower cholesterol and blood pressure, and manage diabetes with lifestyle changes and medicine. This reduces the risk of heart attacks and strokes.

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## About Choosing Wisely Canada

Choosing Wisely Canada is the national voice for reducing unnecessary tests and treatments in health care. One of its important functions is to help clinicians and patients engage in conversations that lead to smart and effective care choices.

## 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. Canadian reviewers of this pamphlet included 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.