

## Heart Health

The heart is one of the largest and most important muscles in the body. A heart attack or MI (myocardial infarction) occurs when the cells in the heart are deprived of oxygen (due to blockages in the arteries that carry oxygen to the heart) and start to die.

Heart attacks are directly responsible for about 10% of all Canadian deaths each year. Although having a heart attack is very serious, the chances of survival are greatly increased if you are able to get to a hospital right away.

The myocardium (the muscle that makes up the wall of the heart), like every other organ in the body, needs oxygen to stay alive. The coronary arteries are the vessels that supply the heart with oxygen. In coronary heart disease, the coronary arteries are plugged or narrowed by fatty deposits (plaques) that reduce the amount of blood flow that gets to the heart; a process called atherosclerosis.

Most heart attacks occur when the plaques lining the coronary arteries rupture resulting in a blood clot that may partially or completely block blood flow. If the blockage is severe enough, the heart cells start to die and the symptoms of a heart attack appear. Most people that experience a heart attack will also experience symptoms in the days leading up to the attack. The most common symptom of a heart attack is chest pain (or angina) but other symptoms may include extreme fatigue, shortness of breath, anxiety, sweating, nausea and vomiting or light-headedness. Chest pain occurs when the heart muscle is not getting enough oxygen; a condition called ischemia, and tends to get worse or more frequent as the heart attack approaches. It is often difficult to distinguish angina from a heart attack. The symptoms of a heart attack are usually more severe and longer lasting (at least 20 minutes) than angina. Chest pain often presents as a tightness, pressure or squeezing feeling in the chest, often associated with sharp pain. The pain may also radiate to the back, jaw, or left arm and shoulder. Although chest pain is usually the first symptom, up to 20% of people suffering a heart attack may not experience any chest pain.

Most people that experience a heart attack also experience arrhythmias or irregular heartbeats. When the heart fails to receive enough blood, the main pumping chamber of the heart, the left ventricle, begins to quiver uselessly instead of pumping fully. This condition, ventricular fibrillation, is quite serious and if left untreated can result in death in less than 5 minutes. However, not all heart attacks are this severe and many may go unnoticed for quite some time, or be thought of as heartburn. In fact, distinguishing a heart attack from heartburn is not that easy. Antacids or belching can temporarily relieve heart attack pain. Additionally, the nitroglycerin sprays or pills that people with angina often carry with them may also temporarily relieve the pain, but the pain may quickly return. It is important to use discretion and common sense when trying to distinguish a heart attack from angina or heartburn; if the pain is worse, different, or more frequent than usual, it is important to see a doctor.

The best way to prevent a heart attack is by identifying and eliminating the risk factors such as smoking, obesity, high cholesterol or fatty diets. Talking to your doctor or pharmacist about your risk factors and how to make the right lifestyle changes to reduce your chances of a heart attack are crucial. Simple changes may include exercising more often to reduce weight and cholesterol, eating healthy and reducing or eliminating high salt and fatty foods in your diet. Your pharmacist, doctor or nutritionist can help you make the right changes and choices.

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