

Heart&Stroke

# Taking Control

Lower your risk of heart disease and stroke



HEART &  
STROKE  
FOUNDATION

*Finding answers. For life.*

[www.heartandstroke.ca](http://www.heartandstroke.ca)

# Heart Disease

## Are you at risk?

Heart disease is a general term that describes many heart conditions, but coronary artery disease (CAD) is the most common. CAD occurs when blood vessels in the heart are blocked or narrowed, preventing oxygen-rich blood from reaching the heart muscle. Chest pain (also known as angina) or a heart attack can be the result. Find out if you're at risk. Check all the boxes that apply to you.

### Risk factors you can't control – heart disease

#### ☐ **Age**

As you get older, your risk of heart disease increases

#### ☐ **Gender**

Male, over the age of 55 years

Female, after menopause

#### ☐ **Family history**

Your risk of heart disease is increased if close family members – parents, siblings or children – developed heart disease before age 55 or, in the case of female relatives, before menopause.

#### ☐ **Ethnicity**

First Nations people and those of African or South Asian descent are more likely to have high blood pressure and diabetes and therefore, are at greater risk of heart disease than the general population.

### Risk factors you can do something about

- ☐ High blood pressure (hypertension)
- ☐ High blood cholesterol
- ☐ Smoking
- ☐ Diabetes
- ☐ Being overweight
- ☐ Physical inactivity
- ☐ Excessive alcohol consumption
- ☐ Stress

The more risk factors you have for heart disease, the greater your risk. Read on to learn how you can take control and reduce your risk.

# Stroke

## Are you at risk?

Stroke occurs when the blood supply to part of the brain is cut off. Without oxygen-rich blood, brain cells begin to die. If the blood supply is not restored, the affected part of the brain dies, causing disability and/or death. Find out if you're at risk. Check all the boxes that apply to you.

### Risk factors you can't control – stroke

#### ☐ **Age**

Although strokes can occur at any age, most strokes occur in people over 65.

#### ☐ **Gender**

Until women reach menopause they have a lower risk of stroke than men. However, ultimately, more women than men die of stroke.

#### ☐ **Ethnicity**

First Nations people and those of African or South Asian descent tend to have higher rates of high blood pressure and diabetes and, therefore, are at greater risk of stroke than the general population.

#### ☐ **Family history**

Your risk of stroke is increased if close family members – parents, siblings or children – had a stroke before age 65.

#### ☐ **Prior stroke or TIA (transient ischemic attack)**

If you've had a previous stroke or a TIA, also known as a mini-stroke, your risk of stroke is greater.

### Risk factors you can do something about

- ☐ High blood pressure (hypertension)
- ☐ High blood cholesterol
- ☐ Smoking
- ☐ Diabetes
- ☐ Heart disease – atrial fibrillation
- ☐ Being overweight
- ☐ Physical inactivity
- ☐ Excessive alcohol consumption
- ☐ Stress

The more risk factors you have for stroke, the greater your risk. Read on to learn how you can take control and reduce your risk.

## Reduce your risk of heart disease and stroke



Heart disease and stroke are Canada's leading cause of death, so it's important to understand how to prevent these serious illnesses that will impact the lives of almost 70% of Canadians in some way.

A great place to start is to learn to identify and control your risk factors – and the Heart and Stroke Foundation can help.

While you can't control your age, family history, gender or ethnicity, there are many other risk factors – obesity, diabetes, smoking, high blood pressure and elevated blood cholesterol – that you can control.

Talk to your healthcare professional and use this booklet to help guide you towards a heart-healthier life.

### Take the first step towards a longer, healthier life!

Look for the *Heart&Stroke Risk Assessment™* icon on our Web site at [www.heartandstroke.ca](http://www.heartandstroke.ca) and get your personalized risk profile. It's quick, free and confidential. And when you're finished, you'll better understand your risk of heart disease and stroke.

You can also receive a customized action plan for healthy living that includes practical online tips, tools, recipes and other resources to help you reduce your risk of heart disease and stroke.

## High Blood Pressure

### What is it?

Also known as hypertension, high blood pressure occurs when the force of blood pushing against artery walls as blood is pumped out of the heart, is excessively high. High blood pressure is the number one risk factor for stroke and a major risk factor for heart disease, so it is very important that it is properly controlled.

When blood pressure consistently measures more than 140/90 mm Hg it is considered high. A normal blood pressure reading is below 120/80 mm Hg. For individuals with diabetes, a blood pressure that consistently measures 130/80 mm Hg is considered high.

If you have several risk factors for heart disease and stroke or other problems related to high blood pressure such as diabetes or kidney disease, your doctor may

decide to treat your blood pressure even if it is not as high as 140/90 mm Hg.

Over time, high blood pressure can damage blood vessel walls and cause the build-up of fatty plaque that can narrow and eventually block arteries. It also strains the heart and eventually weakens it. Very high blood pressure can also cause blood vessels in the brain to burst.

By taking action you can get your blood pressure under control and significantly reduce your risk of heart attack and stroke.

### **Lower your risk**

- ✦ Have your blood pressure taken by a healthcare professional at least once every two years and discuss your reading together. If you have high blood pressure, your doctor may monitor you more often and provide specific recommendations
- ✦ If you have been told you have high-normal blood pressure, Canadian guidelines recommend that you have your blood pressure checked at least once a year. High normal ranges between 130/85 and 139/89
- ✦ Quitting smoking can help reduce blood pressure. If you smoke, use the tips on page 8 to become smoke-free
- ✦ If you are overweight, you should work with your healthcare provider to develop a plan to achieve and maintain a healthy weight. Even a modest weight loss can make a big difference to your blood pressure
- ✦ Get active and stay physically active. Physical activity helps reduce high blood pressure and improves overall heart health
- ✦ Stress can cause blood pressure to rise, so set aside some time every day to relax
- ✦ If you drink alcohol, limit yourself to 1-2 drinks per day to a weekly maximum of 9 for women and 14 for men. If your blood pressure is high, talk to your doctor about drinking alcohol
- ✦ If your blood pressure is a concern, ask your doctor for information on home blood pressure monitoring
- ✦ If your doctor has prescribed high blood pressure medication, be sure to take it exactly as directed
- ✦ If you have high blood pressure, your doctor may also suggest that you reduce the amount of salt in your diet

# High Blood Cholesterol

## What Is It?

High blood cholesterol is a major risk factor for heart disease and stroke. A fat found in the blood, cholesterol is a vital building block that the body uses to make cell membranes, vitamin D and hormones.

There are three main types of blood fat. These are low-density lipoprotein (LDL) cholesterol, often referred to as “bad” cholesterol, high-density lipoprotein (HDL) cholesterol, known as “good” cholesterol, and triglycerides.

LDL cholesterol promotes the build-up of fatty plaque on the artery walls, while HDL helps clear the arteries. High triglycerides are a danger to men and women, but may be a higher risk to women and also are linked with excess weight, excess alcohol consumption and diabetes. High triglyceride levels may be a signal that additional heart disease risk factors are present or that lifestyle changes are needed.

High blood cholesterol can narrow arteries, increasing the risk of heart disease and stroke. Modifications to your diet and/or medication can help reduce elevated blood cholesterol levels.

## Lower your risk

Ask your doctor about having your cholesterol tested if you:

- ✧ Are male and over 40
- ✧ Are female and over 50 years and/or post-menopausal
- ✧ Have heart disease or stroke, diabetes or high blood pressure
- ✧ Have a waist measurement of more than 102 cm (40 inches) for men or over 88 cm (35 inches) for women
- ✧ Have a family history of heart disease or stroke

The first step in lowering cholesterol is modifying your diet to reduce total fat consumption. There is evidence that increasing the amount of fibre is also beneficial. Achieving and maintaining a healthy weight, being physically active and smoke-free are also very important in controlling blood cholesterol.

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## **Reduce your fat intake to 20-35% of your daily calories**

- ❖ For a woman this means about 45-75 grams of fat a day
- ❖ For a man this means 60-105 grams of fat a day

## **Consider the quality of fat as well as the quantity**

- ❖ Choose healthy fats such as polyunsaturated and monounsaturated fats found in vegetable oils, nuts and fish
- ❖ Limit your intake of saturated fat, which is found primarily in red meat and high-fat dairy products
- ❖ Avoid trans fats, which are frequently found in foods made with shortening or partially hydrogenated vegetable oil, hard margarines, fast foods and many ready-prepared foods. Trans fats raise bad cholesterol levels and lower levels of good cholesterol

Use *Canada's Food Guide* to plan a healthier diet.

Visit [www.heartandstroke.ca](http://www.heartandstroke.ca) and search on "food guide".

- ❖ Choose lower-fat dairy products such as skim milk and low-fat cheeses
- ❖ Eat more whole grains, cereals, fruit and vegetables
- ❖ For snacks, try low-salt pretzels, plain popcorn or fruit, rather than higher-fat or "junk food" type of snacks
- ❖ Use low-fat cooking methods such as baking, broiling or steaming and try to avoid fried food
- ❖ Be smoke-free! Smoking increases LDL "bad" blood cholesterol levels
- ❖ Get physically active. Being physically active most days of the week can improve "good" cholesterol levels
- ❖ If you are on a cholesterol-lowering medication, take it exactly as directed

# Smoking

## Why quit?

Smoking and/or exposure to second-hand smoke has many negative health effects that increase your risk of heart disease and stroke. These include:

- ❖ Contributing to the buildup of plaque in your arteries
- ❖ Increasing the risk of blood clots
- ❖ Reducing oxygen in the blood
- ❖ Causing the heart to work harder

## Lower your risk

- ❖ **Ask for help.** Becoming smoke-free can be hard, so don't be afraid to ask for help and support from family, friends and your doctor. Nicotine replacement and prescription products may be helpful. Please speak to your health care professional about becoming smoke free and to find out what is the right method to help you quit.
- ❖ Quit smoking and avoid exposure to second-hand smoke. You will immediately reduce your risk of heart attack and stroke.
- ❖ If you are ready to quit, set a "Quit Date" now and write it down.
- ❖ Drink plenty of water. It helps manage withdrawal more effectively.
- ❖ Substitute sugarless gum, carrot sticks or low-calorie snacks to control the urge to smoke.
- ❖ Keep your hands busy with keys, coins or worry beads.
- ❖ Make your home and car smoke-free.

For more information on quitting and quit-lines, visit [www.heartandstroke.ca](http://www.heartandstroke.ca) and search "smoke free" or Health Canada at [www.gosmokefree.ca](http://www.gosmokefree.ca) or 1-800-O-Canada.



"After you quit smoking, your risk of heart attack begins to decrease within just two days. Within a year it's cut in half. And within 10 to 15 years, your risk of heart disease is almost the same as a non-smoker's."

**Paul W. McDonald, PhD**

**Heart and Stroke Foundation Researcher**

Associate Professor of Health Studies and Gerontology

Co-Director, Population Healthy Research Group, University of Waterloo



# Diabetes

## What is it?

The body needs insulin to break down sugar for energy. Diabetes is a condition that develops when the body does not produce enough insulin or effectively use the insulin it produces. It increases the risk of high blood pressure, atherosclerosis, coronary artery disease and stroke, particularly if blood sugar levels are poorly controlled.

There are three types of diabetes:

- ❖ Type 1 diabetes usually develops in children, teenagers, young adults and even people in their 30s, and must be treated with insulin. It occurs when the pancreas no longer produces insulin. The body needs insulin to use sugar for energy. Approximately 10% of people with diabetes have type 1.
- ❖ Type 2 diabetes occurs when the pancreas does not produce enough insulin or when the body does not effectively use the insulin that is produced. Ninety percent of people with diabetes have type 2. It is sometimes referred to as “adult-onset” diabetes or non-insulin, and often develops in overweight individuals. This type of diabetes can sometimes be eliminated or controlled by diet and weight loss.
- ❖ Gestational diabetes occurs in 2%-4% of women during pregnancy and disappears after the birth of the baby. However, later in life, it can increase the risk of diabetes for mother and child.

## Lower your risk

If you are 40 or older, have a family history of diabetes, have high blood pressure, high blood cholesterol or are overweight, ask your doctor to test your blood sugar levels.

If you are overweight, work to achieve and maintain a healthy weight.

- ❖ Ask your doctor to refer you to a registered dietitian to learn about healthy eating. You should follow *Canada's Food Guide*, which includes limiting the amount of fat you eat.
- ❖ Work closely with your healthcare team to set goals for your blood glucose and know your target levels.

- ❖ Learn from your doctor or diabetes educator how to monitor your blood sugar. Notify your doctor if you cannot control your blood sugar.
- ❖ Get physically active, and work with your doctor to design a program that's right for you.
- ❖ For more information about diabetes, call your local branch of the Canadian Diabetes Association.

## Transient Ischemic Attack

### What is it?

A transient ischemic attack (TIA) is a “mini-stroke”. Like stroke, it can hit suddenly and without warning and last a few minutes, or up to 24 hours. The warning signs of TIA are the same as stroke. The difference with a TIA is the symptoms eventually stop. A TIA is a warning that there is something seriously wrong with blood flow to the brain and that you are at risk of having a full-blown stroke. Up to 15% of people who have a stroke have had a TIA.

### Lower your risk

- ❖ Know the warning signs of stroke and TIAs. If they occur, seek immediate medical attention.
- ❖ Effectively manage high blood pressure, high blood cholesterol and/or diabetes.
- ❖ If your doctor prescribes medication to reduce the risk of TIA, such as ASA (acetylsalicylic acid or Aspirin® as it is commonly known), be sure to take exactly as directed.
- ❖ Change your lifestyle. Be smoke-free, achieve and maintain a healthy weight, reduce alcohol consumption, manage stress and be physically active.



“Research by the Heart and Stroke Foundation showed that ASA can prevent stroke. This was an early but extremely important discovery that still plays an important role in the treatment of stroke.”

**Jeffrey Weitz, MD**

**Heart and Stroke Foundation Researcher**

Director, Henderson Research Centre, Hamilton, Ontario

# Heart Disease

## What is it?

Heart disease is a general term that describes many heart conditions. It is also a major risk factor for stroke. People with heart disease are twice as likely to have a stroke as those without it. Atrial fibrillation is one heart problem that makes the heart beat irregularly and may cause blood clots to form, which can lead to a stroke.

## Lower your risk

- ❖ Be aware of your risk factors and make changes to address them.
- ❖ If you smoke, use tips on page 8 to help you become smoke-free. If you don't smoke, don't start.
- ❖ Be physically active.
- ❖ Achieve and maintain a healthy weight.
- ❖ Take all medication exactly as prescribed.
- ❖ Tell your doctor if you experience an irregular heartbeat or fluttering in your chest.
- ❖ If you have high blood pressure, take steps to manage it effectively.
- ❖ Eat a healthy diet that is lower in fat, especially saturated and trans fats, and includes fresh vegetables and fruit, complex carbohydrates and high-fibre foods.
- ❖ Reduce or eliminate alcohol consumption.
- ❖ If you have diabetes, maintain a healthy blood sugar level.
- ❖ Manage stress.



"With nearly 60% of Canadians being overweight or obese, we are faced with a serious public health problem."

**Bruce A. Reeder MD, MHSc, FRCPC**

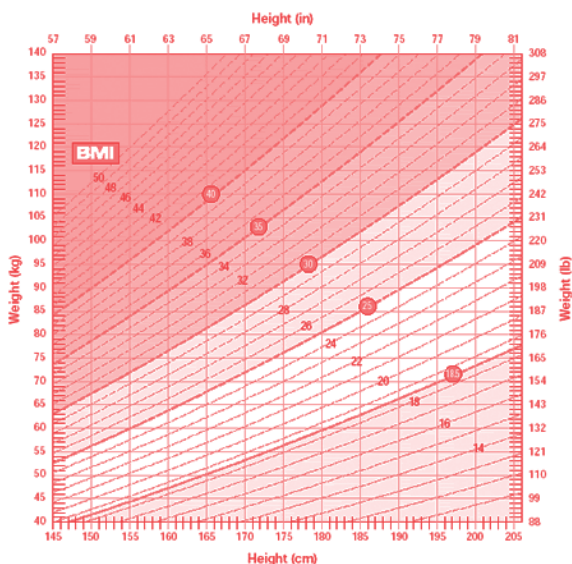
**Heart and Stroke Foundation Researcher**

Department of Community Health and Epidemiology  
University of Saskatchewan

# Unhealthy Weight

## What is it?

BMI and waist circumference are considered good measures for assessing the risk of weight-related health problems. The best way to determine if your weight is putting you at risk for obesity-related diseases such as high blood pressure, high blood cholesterol, diabetes and heart disease and stroke, is to use the BMI Body Mass Index calculator. Although the BMI is useful for creating guidelines for healthy adults (ages 18 to 65), it does not apply to infants, children, adolescents, pregnant or breastfeeding women, older adults (over 65 years) or extremely muscular individuals.



To estimate BMI, locate the point on the chart where height and weight intersect. Read the number on the dashed line closest to this point. For example, if you weigh 69 kg and are 173 cm tall, you have a BMI of approximately 23, which is normal weight.

You can also calculate your BMI using this formula:  

$$\text{BMI} = \text{weight(kg)} / \text{height(m}^2\text{)}.$$

Health Risk Classification According to Body Mass Index (BMI)		
Classification	BMI Category (kg/m <sup>2</sup> )	Risk of developing health problems
Underweight	< 18.5	Increased
Normal Weight	18.5 - 24.9	Least
Overweight	25.0 - 29.9	Increased
Obese class I	30.0 - 34.9	High
Obese class II	35.0 - 39.9	Very high
Obese class III	≥ 40.0	Extremely high

*(Source: Health Canada. Canadian Guidelines for Body Weight Classification in Adults. Ottawa: Minister of Public Works and Government Services Canada; 2003.)*

People that carry excess weight around their middle (apple shape) versus around their hips (pear shaped) are at greater risk of health problems (high blood pressure, high blood cholesterol, diabetes and heart disease). In general, if you're a man and your waist measures more than 102 centimetres (40 inches) or a woman more than 88 centimetres (35 inches), you are at increased risk of developing health problems such as heart disease, high blood pressure and diabetes. For persons of Chinese or South Asian descent you are at increased risk for men if you are more than 90 centimetres (35 inches) for men or 80 centimetres (32 inches) for women.

## Lower your risk

- ✦ Achieve and maintain a healthy weight by eating a heart-healthy diet and being physically active.
- ✦ Lose weight slowly. Make your goal of obtaining a healthy weight a long-term commitment.
- ✦ Avoid fad diets.
- ✦ Eat a healthy diet that is lower in fat, especially saturated and trans fats, and includes fresh vegetables and fruit, complex carbohydrates and high-fibre foods.
- ✦ Use less fat in cooking. Bake, broil steam, boil, microwave or barbecue your food.
- ✦ Drink lots of water.
- ✦ Manage portion size. Divide your plate into four sections. Fill  $\frac{3}{4}$  with grains and vegetables and fill the remaining quarter with meat or meat alternatives.
- ✦ If overeating is your way of coping with stress, identify the source of your stress and learn new ways to cope.

# Physical Inactivity

People who are physically inactive have a higher risk of heart disease and stroke than those who are physically active. An active, healthy lifestyle can help prevent and manage high blood pressure, high blood cholesterol, unhealthy weight and stress – all of which increase your risk of heart disease and stroke.

## Lower your risk

- ❖ Accumulate 30 to 60 minutes of moderate physical activity most days. Minutes count – add it up ten minutes at a time. Not sure? Consult with a health-care professional.
- ❖ Start slowly, set modest goals and gradually increase your physical activity levels over time.
- ❖ Choose activities you enjoy.
- ❖ Join a group or use the “buddy system” to stay motivated.
- ❖ When engaging in physical activity you should always be able to talk. If you feel short of breath, dizzy or experience discomfort in your chest, shoulders or arms, STOP what you are doing. For the warning signals of heart attack and stroke, see pages 17 and 18.
- ❖ If you have been inactive, talk to your doctor before starting a physical activity regimen.



“While research on the role of individual risk factors for heart disease is well established, there is also a growing body of research around the role of environmental, social and economic factors in influencing health

and lifestyles. The Heart and Stroke Foundation is increasingly supporting and tracking this research and exploring ways we can work with others to advocate for changes that address these very complex issues.”

**Kim Raine, PhD, RD**

**Heart and Stroke Foundation Researcher**

Director and Professor for Health Promotion Studies,  
AHFMR Health Senior Scholar, University of Alberta

# Alcohol consumption\*

Heavy drinking, including binge drinking, is strongly associated with stroke. More than two alcoholic drinks a day raises blood pressure levels, a risk factor for heart disease and stroke.

## Lower your risk

- ✧ If you drink alcohol, limit yourself to 1-2 drinks per day to a weekly maximum of 9 for women and 14 for men.
- ✧ Talk to your doctor about the risks of drinking alcohol.
- ✧ If you have high blood pressure, limit your alcohol use and/or speak to your doctor about alcohol.
- ✧ If you don't drink, don't start.

## One drink equals:

- ✧ 341 mL / 12 oz. (1 bottle) of regular strength beer (5% alcohol)
- ✧ 142 mL / 5 oz. wine (12% alcohol)
- ✧ 43 mL / 1½ oz spirits (40% alcohol)

Don't drink on an empty stomach. Substitute with non-alcoholic beverages, such as water or fruit juice.

\* Guidelines do not apply if you have liver disease, mental illness, are taking certain medication, or have a personal or family history of alcohol abuse, are pregnant, trying to get pregnant or breastfeeding. If you are concerned about how drinking may affect your health, check with your doctor.

# Stress

Stress can be a good thing. It drives and exhilarates us and stimulates the mind and body. But too much stress can contribute to high blood cholesterol levels, high blood pressure and can increase the risk of blood clots – all of which increase the risk of heart disease and stroke.

## Lower your risk

- ✧ Identify the source of your stress. The first step in managing your stress is figuring out the cause so you can take steps to address the problem.
- ✧ Be physically active. Physical activity can be an effective stress-buster and a great heart-health booster.
- ✧ Share your feelings. Talking to a friend or family member can provide you with the moral support to relieve stress.
- ✧ Take time for yourself. In trying to meet the needs of everyone around you, don't short-change yourself.
- ✧ Don't skip vacations. Getting away from the workplace and spending time with those you love is important to your mental – and physical – health.
- ✧ Try relaxation techniques. Meditation and deep breathing can relieve tension and help reduce blood pressure.
- ✧ Get plenty of sleep and eat a heart-healthy diet.
- ✧ Don't be afraid to ask for help. If you feel chronically stressed, a healthcare professional can offer support and treatment.

## Heart Disease and Stroke – Steps to reduce your risk

- ✧ Know and control your risk factors
- ✧ Be smoke-free
- ✧ Be physically active
- ✧ Know and control your blood pressure
- ✧ Know and control blood cholesterol levels
- ✧ Eat a heart-healthy diet
- ✧ Achieve and maintain a healthy weight
- ✧ Manage your diabetes
- ✧ Limit alcohol use
- ✧ Reduce stress
- ✧ Visit your doctor regularly and follow his/her advice



# Warning Signals of a Heart Attack

## Pain

- ❖ Sudden discomfort or pain that does NOT go away with rest
- ❖ Pain may be in the chest, neck, jaw, shoulder arms or back
- ❖ Pain may feel like burning, squeezing, heaviness, tightness or pressure
- ❖ In women, pain may be more vague

## Shortness of breath

- ❖ Difficulty breathing

## Nausea

- ❖ Indigestion
- ❖ Vomiting

## Sweating

- ❖ Cool, clammy skin

## Fear

- ❖ Anxiety
- ❖ Denial

## IF YOU EXPERIENCE THE WARNING SIGNALS OF A HEART ATTACK YOU SHOULD IMMEDIATELY:

- ❖ **CALL 9-1-1** or your local emergency number for help, or have someone call for you.
- ❖ Stop all activity and sit or lie down, in whatever position is most comfortable.
- ❖ If you take nitroglycerin, take your normal dosage.
- ❖ If you are experiencing chest pain, chew and swallow one (1) adult 325 mg ASA tablet (acetylsalicylic acid, commonly referred to as Aspirin®) or two 80 mg tablets. Pain medicines like acetaminophen (e.g. Tylenol) or ibuprofen (e.g. Advil®) do not work the same way as ASA (i.e. Aspirin®) and therefore will not help in the emergency situation described above.
- ❖ Rest comfortably and wait for emergency medical services (EMS) (e.g., ambulance) to arrive.

**QUICK ACTION SAVES LIVES.**

# Warning Signs of a Stroke or Transient Ischemic Attack (TIA)

## Weakness

Sudden loss of strength or sudden numbness in the face, arm or leg, even if temporary.

## Trouble speaking

Sudden difficulty speaking or understanding or sudden confusion, even if temporary.

## Vision problems

Sudden trouble with vision even if temporary.

## Headache

Sudden severe and unusual headache.

## Dizziness

Sudden loss of balance, especially with any of the above.

If you experience any of these symptoms tell someone immediately and **CALL 9-1-1** or your local emergency number.



“80% of Canadians have at least one risk factor for cardiovascular disease — which makes it more important than ever for the Heart and Stroke Foundation to support research into the root causes of heart disease risk factors AND discovery of successful strategies to prevent the development of these risk factors.”

### Jacques Genest, MD

#### Heart and Stroke Foundation Researcher

Cardiologist,

Director, Division of Cardiology

McGill University Health Centre, Royal Victoria Hospital

Professor of Medicine, McGill University

# Become a Life Saver

Recognizing cardiac arrest: When a person stops breathing and has no heartbeat, the condition is called cardiac arrest. A cardiac arrest can have a variety of causes – heart attack, drowning, stroke, electrocution, suffocation, drug overdose, motor vehicle accident or other trauma. If you find an adult, child or infant who is not breathing you must act quickly. Protect your loved ones – learn what to do in an emergency situation.

By having someone present who knows how to respond to a cardiac arrest, a person's odds of survival and recovery may increase by 30 percent or more. Calling 9-1-1 as quickly as possible brings emergency medical services to the scene. Cardiopulmonary resuscitation (CPR) – a skill that involves pushing hard and fast on the chest and giving rescue breaths – has the power to restore blood flow in those suffering cardiac arrest, keeping blood circulating in the body until an ambulance arrives on the scene. CPR, combined with the use of an automated external defibrillator (AED) – a machine that is used to correct an irregular heart rhythm – can dramatically improve survival from cardiac arrest.

The Heart and Stroke Foundation of Canada sets the Canadian Guidelines for CPR, defibrillation and other aspects of emergency cardiovascular care in Canada. The Foundation is a leader in CPR techniques and instruction. To find out about courses in your area, simply call your local Heart and Stroke Foundation office or 1-888-HSF-INFO.



**HEART &  
STROKE  
FOUNDATION**

*Finding answers. For life.*

## **Thank you to the millions of Canadians who put their hearts into supporting our vital work.**

Because of you, the Foundation has helped reduce the mortality rate from heart disease and stroke by 70% over the past 50 years. Sadly, still one in three Canadian deaths are due to heart disease and stroke every year – and millions remain at risk.

More answers are needed to facilitate further medical advances, effect social change and provide public and professional health education that save lives – today and for generations to come.

The Heart and Stroke Foundation web site offers a wealth of information and tools to help you and your family prevent and manage heart disease and stroke. At the site, you may find:

- Delicious heart-healthy recipes
- Tips to get and stay active for life
- Current heart disease and stroke patient information
- Breaking news on Foundation funded research
- Free newsletters, Heart&Stroke He@lthline and He@lthline for Parents
- How to get involved and make a difference in your community

**PUT YOUR HEART INTO IT.™**

Learn more at

**[www.heartandstroke.ca](http://www.heartandstroke.ca)**

or call

**1-888-HSF-INFO  
(1-888-473-4636)**

This booklet has been independently researched, written and reviewed by the Heart and Stroke Foundation and is based on scientific evidence.