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Rehab

PUBLIC EDUCATION SERIES

**LivingWith**  **LivingWell**

## You Have the Power to Prevent Stroke:

Tips to help you lower the risk factors  
you can control



*Living With/Living Well* is a free public education program hosted by Toronto Rehab. It features events and resource materials to help people learn to overcome or prevent serious injury and illness so they can live life to the fullest. For more information, visit:

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## You have the power to prevent stroke

Someone has a stroke every 10 minutes in Canada.

The vast majority survive, but like any major illness, a stroke changes people's lives forever. About half of all stroke live with moderate to severe impairment. Some require long-term care. Another 25 per cent of survivors live with minor impairment. About 300,000 Canadians currently live with the effects of stroke.

Many different factors increase your risk of having a stroke. Some of these factors are hereditary or are natural processes that cannot be changed. Other factors, however, are related to lifestyle. You have the power to modify, treat or control these factors to reduce your risk of having a first or subsequent stroke. Toronto Rehab is pleased to provide this resource booklet to identify the risk factors and provide practical tips to help you control the ones you can.

### Toronto Rehab's Stroke Service

Our Stroke Service, part of the Neuro Rehab Program, offers a full range of inpatient and outpatient assessment and therapy services to help adults who have experienced a recent stroke. Through the service, an interprofessional team of rehab specialists works with patients and their families to overcome problems that affect balance, communication, emotions, memory, and swallowing.

## Types of stroke

A stroke is an injury to a part of the brain that causes a loss of brain function. There are two main types of stroke: ischemic and hemorrhagic.

### Ischemic stroke

Ischemic strokes happen when blood flow to the brain is interrupted because of a blood clot. About 80 per cent of strokes are ischemic.

### Hemorrhagic stroke

Hemorrhagic strokes are caused by uncontrolled bleeding in the brain. About 20 per cent of strokes are hemorrhagic.

### Mini-stroke

Mini-strokes, or Transient Ischemic Attacks (TIAs), are caused by a temporary interruption of blood flow to the brain. The symptoms are similar to an ischemic stroke, but go away within a few minutes or hours. Experiencing a TIA increases your risk of having a full-blown stroke. Each year, about 15,000 Canadians report experiencing a TIA. Many more go unreported.

## Effects of stroke

The effects of stroke vary depending on the severity and location of injury and the state of your health before the stroke. Effects can include:

- Weakness or paralysis
- Difficulty talking, reading, thinking or learning new information
- Loss of short-term memory and judgement
- Difficulty chewing, swallowing and speaking
- Problems with breathing and heart function
- Impaired vision
- Balance and coordination challenges



## Risk factors you can't control

A wide range of factors increase your risk of having a stroke. Some of these factors are hereditary or are natural processes that cannot be changed, including:

### Age

Your chances of having a stroke go up as you get older. In fact, the risk of stroke doubles every 10 years after age 55. Two thirds of strokes occur among people over 65.

### Gender

Men are slightly more at risk of having a stroke than women. Yet more women die as a result of stroke than men. This is largely because women tend to live longer than men.

### Ethnic origin

Canadians of First Nations, African or South Asian descent tend to have a higher risk of stroke because they have higher rates of high blood pressure and diabetes.

### Family history

If any of your immediate family members, which includes your parents, grandparents or siblings, had a stroke before they were 65, you have a higher risk of having a stroke.

### Prior stroke or TIA

If you have had a previous stroke or a TIA, your risk is increased. In fact, stroke survivors have a 20 per cent chance of having another stroke within two years.

## Risk factors you can control and how to control them

Many of the factors that increase your risk of having a stroke are related to lifestyle and are within your control. You have the power to change your behaviours and reduce your risk. Here are some tips to help:

### High blood pressure (hypertension)

The single most important risk factor for stroke that is within your control is high blood pressure. If you don't know whether you have high blood pressure, you should find out. If yours is high, there are a few simple steps you can take to lower it:

- Reduce the amount of salt in your diet.
- Increase your physical activity.
- Consistently take any medications as your doctor prescribed.

It is important to check your blood pressure regularly. You can keep a log to track your progress.

### High blood cholesterol

In addition to increasing your risk of having a heart attack, high blood cholesterol may also play a part in causing a stroke by blocking the arteries leading to the brain. You should ask your doctor to test your blood cholesterol. If it's high, you can use these tips to control it:

- Reduce the amount of fat in your diet.
- Increase your physical activity.
- Consistently take any medications as your doctor prescribed.

### Heart disease (atrial fibrillation)

People with heart disease are twice as likely to have a stroke. Atrial fibrillation is particularly linked to stroke: up to 15 per cent of all strokes are due to it. Atrial fibrillation is a type of abnormal heartbeat rhythm (called arrhythmia). It can cause blood clots to form in the heart, which can travel to the brain and cause stroke. Atrial fibrillation can be caused

by high blood pressure, congenital anomalies, family history, complications after heart surgery or other diseases, such as a thyroid condition. If you are on medication for atrial fibrillation, be sure to take it as prescribed.

### Diabetes

The body needs insulin to break down sugar for energy. Diabetes develops when your body does not produce enough insulin or does not effectively use the insulin it produces. Diabetics are at a higher risk of stroke than non-diabetics. If you are 40 or older, overweight, and have high blood pressure, high blood cholesterol or a family history of diabetes, you should ask your doctor to test your blood sugar. If you have diabetes, you can use these tips to reduce its impact on your risk of stroke:

- Use your insulin (or oral drug) consistently.
- Monitor your blood sugar and tell your doctor if you cannot keep it under control.
- Become more physically active. Work with your doctor to design a fitness program.
- Eat a nutritious diet by following Canada's Food Guide to Healthy Eating.

### Being overweight

Almost 60 per cent of Canadian adults are overweight or obese. This is a growing concern since being overweight is a major risk factor for stroke and heart disease. Achieving and maintaining a healthier weight can significantly reduce your risk. It can also help control other conditions such as high blood pressure, high blood cholesterol and diabetes. Even a five per cent weight loss can have a major impact on risk. The best way to achieve and maintain a healthier weight is to manage your nutrition and physical activity, which are the next two risk factors for stroke.

## Nutrition

Eating a healthy, balanced diet reduces your risk of stroke. Here are some tips for healthy nutrition:

- Eat a low fat diet and avoid saturated and trans fats. No more than 30 per cent of your daily calories should come from fat.
- Use whole grain products and foods higher in fiber.
- Include 8-10 servings of vegetables and fruits each day.
- Include 2-3 servings of low fat dairy products each day.
- Eat fish 2-3 times per week.
- Include beans, nuts and lentils instead of meat several times a week
- Manage portion size. Fill half your plate with vegetables, one quarter with grains and one quarter with lean meat or meat alternatives.
- Reduce your salt intake.

## Physical inactivity

People who are physically inactive have twice the risk for heart disease and stroke. Make active living part of your daily life. You don't have to do an intense workout to get the health benefits — just 20-60 minutes of activity most days of the week, which can be accumulated in 10-minute sessions, will make a difference. Choose activities you enjoy, such as walking, gardening, housework or dancing with your kids. Find a friend to keep you motivated. You should speak to a health care professional before starting any vigorous exercise program. If you ever feel short of breath, dizzy or pain in your chest, shoulders or arms, STOP what you are doing and call 911 immediately.

## Excessive alcohol consumption

Drinking too much alcohol can increase your risk of stroke. Healthy adults shouldn't drink more than two alcoholic beverages a day. Men should limit their consumption to 14 standard size drinks per week, and women should limit theirs to nine standard size drinks. If you have already had a stroke, you should avoid alcoholic beverages for the first year afterwards to maximize your recovery.

## Smoking

Smokers have twice as high a risk of having a stroke as non-smokers. Smoking is especially dangerous for women over 30 who take birth control pills. If you quit now, your risk will be lowered within five years to the same level as someone who has never smoked. You should consult your doctor for help with quitting. Here are a few tips that might help:

- Change your smoking routines: Keep your cigarettes in a different place. Smoke with your other hand. Don't do anything else when smoking.
- When you want a cigarette, wait a few minutes. Try to think of something to do instead of smoking, such as chewing gum or drinking a glass of water.
- Eat regular meals. Hunger is sometimes mistaken for the desire to smoke.
- Start a money jar with the money you save by not buying cigarettes.

## Stress

A little stress can sometimes be a good thing, but too much stress can harm your health. It can make you feel tense or anxious, or give you headaches, stomachaches or cold-like symptoms. Long-term exposure can lead to depression and anxiety. It can also increase your risk of stroke and heart disease. Here are some stress-busting tips:

- Figure out the source of your stress.
- Eat a healthy diet and be physically active.
- Share your feelings by talking to friends, family or coworkers.
- Make time for yourself in between trying to meet everyone else's needs, including taking vacations.
- Laugh — it's your body's natural stress-release mechanism.

## Medications

A number of medications may be recommended to reduce your risk of stroke. It is important to discuss them with your physician and pharmacist so you understand their purpose and potential side effects. Don't change doses or durations without consulting a health care provider. Also, be aware that herbal products or supplements may interact with your prescription medications. Some of the common types of medications include:

### Anti-platelet agents

(i.e. aspirin, clopidogrel, dipyridamole)

These reduce the viscosity of the blood and prevent platelets from sticking together.

### Anti-coagulants

(i.e. warfarin)

These thin out the blood and prevent clots from forming. They are often used for atrial fibrillation.

### Blood pressure medications

(i.e. diuretics ("water pills"), ACE-inhibitors (drugs that end in "pril," such as ramipril), calcium channel blockers and beta blockers)

These "relax" the cardiovascular system so that blood pressure is lowered.

### Cholesterol lowering medications

(i.e. "statins," such as atorvastatin, rosuvastatin or simvastatin)

These reduce the production of cholesterol by blocking a key "factory" inside the liver. The net effect is that bad cholesterol is pulled away from build-up inside of arteries.

## Recognize the warning signs

Unfortunately, even if you follow all the tips in this booklet, there is no perfect way to prevent stroke. Fortunately, quick action and treatment can significantly improve survival and recovery. That's why it is important to recognize the warning signs:

### Weakness

Sudden loss of strength or numbness in the face, arm or leg, even if it's only temporary

### Trouble speaking

Sudden difficulty speaking or understanding people, or sudden confusion, even if it's only temporary

### Vision problems

Sudden trouble seeing, even if it's only temporary

### Headache

Sudden, unusual and severe headache

### Dizziness

Sudden loss of balance, especially combined with any of the other signs above

If you experience any of these symptoms, even temporarily, call 911 immediately.

## Additional resources

Below are some resources recommended by Toronto Rehab clinicians and Library Services to help you take action to prevent a stroke.

### Websites

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

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

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

[www.strokeassociation.org](http://www.strokeassociation.org)

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

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

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

[www.mhp.gov.on.ca](http://www.mhp.gov.on.ca)

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

[www.phac-aspc.gc.ca](http://www.phac-aspc.gc.ca)

### Local organizations

The Aphasia Institute - 416-226-3636

B.O.O.S.T. Stroke Club - 416-633-9519

Central Neighbourhood House Stroke Survivors Club -  
416-925-4363 ext. 119

COTA Stroke Club - 416-785-9230 ext. 2294

Sauga Stroke Breakers - 905-615-4670 ext.2471

## About Toronto Rehab

One of North America's leading rehabilitation sciences centres, Toronto Rehab is revolutionizing rehabilitation by helping people overcome the challenges of disabling injury, illness or age related health conditions to live active, healthier more independent lives. Fully affiliated with the University of Toronto as a teaching and research hospital, Toronto Rehab integrates innovative patient care, groundbreaking research and diverse education to build healthier communities and advance the role of rehabilitation in the health system. Find out how at [www.torontorehab.com](http://www.torontorehab.com).

If you would like to support Toronto Rehab's work, please contact the Toronto Rehab Foundation at 416-597-3040 or [foundation@torontorehab.on.ca](mailto:foundation@torontorehab.on.ca).

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