

# Stroke - *prevent it!*



*Make healthy lifestyle your choice.*

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# Know what it is



*Stroke is the 4<sup>th</sup> most common cause of death and a major cause of disability in Singapore. Yet, it is one of the most preventable life-threatening health problems.*

## What is a stroke?

A stroke occurs when blood supply to a part of the brain is cut off, and the cells in that part of the brain die. When this happens, the functions that are controlled by that part of the brain are lost. Depending on which part of the brain is affected, a person with a stroke may have:

- sudden numbness or weakness usually on one side of the body
- sudden confusion or a fit
- difficulty speaking or understanding

- sudden difficulty seeing in one or both eyes
- sudden difficulty in walking
- sudden severe giddiness, loss of balance or coordination
- sudden severe headache with no known cause
- difficulty in swallowing
- loss of concentration and memory
- loss of control of passing urine or passing motion.



If the blood supply in only a small part of the brain is cut off for only a very short time, the stroke is likely to be mild and temporary. However, if blood supply to a large part of the brain is cut off for a long time, the effects will be more severe and are likely to be permanent. In some cases, a stroke can cause death.

### **What causes a stroke?**

Blood is brought to the brain by blood vessels called arteries. A stroke

happens when an artery to the brain is blocked or bursts. A blocked artery causes an ischaemic stroke while a burst artery causes a haemorrhagic stroke.

### **Ischaemic stroke**

An ischaemic stroke occurs when an artery in the brain, which has been narrowed by fatty deposits (atherosclerosis), is completely blocked. The artery in the brain can also be blocked by blood clots and other substances formed in other parts of the

body. These clots can break off and be carried by the bloodstream to the brain.

### **Haemorrhagic stroke**

A haemorrhagic stroke is often caused by an artery which has burst under very high blood pressure. In other cases, part of an artery weakens over time, becomes abnormally thin (an aneurysm), and suddenly bursts.

Understand  
your body



# *What are the risk factors for a stroke?*

Some risk factors for a stroke can be changed while others can be controlled. However, having unchangeable risk factors does not mean that you will definitely get a stroke. By reducing the risk factors that can be controlled, you can greatly lower your chances of getting a stroke.

## **Unchangeable risk factors**

### **Age**

Your risk of stroke increases as you get older. Most strokes happen to people over the age of 65.

### **Gender**

Men have a slightly higher risk of stroke than women.

### **Family history**

You have a higher risk of stroke if you or your family member has had a stroke or TIA (see page 7).

## **Medical conditions that can be controlled**

### **High blood pressure**

This is the most important risk factor for stroke. High blood

pressure damages artery walls and promotes atherosclerosis. Your risk of stroke is 4–6 times higher if you have high blood pressure.

### **Atrial fibrillation**

This is an irregular heartbeat which can be treated. If left untreated, atrial fibrillation can increase your risk of stroke by 4–6 times.

### **High blood cholesterol**

Eating too much foods high in saturated fat\* and cholesterol increases blood cholesterol levels. This promotes atherosclerosis and increases your risk of a stroke by 2-3 times.

### **Diabetes**

Having diabetes speeds up atherosclerosis and doubles your risk of a stroke.

*\*Saturated fat is mainly found in animal products such as meat fat, poultry skin, full cream milk, butter and lard. Coconut cream and coconut milk are also high in saturated fat.*

## **Lifestyle factors that can be changed**

### **Smoking**

Smoking doubles your stroke risk by damaging your blood vessel walls, promoting atherosclerosis, raising your blood pressure and making your heart work harder.

### **Overweight**

Being overweight increases your chances of getting other stroke risk factors like high blood pressure, heart disease, high blood cholesterol, atherosclerosis and diabetes.

### **Sedentary lifestyle**

Being inactive increases your risk of being overweight and having other stroke risk factors.



### **Stress**

Stress, if not managed properly, can lead to high blood pressure.

### **Alcohol**

Drinking too much alcohol increases your risk of stroke.

### **Diet**

A diet high in salt and fat can lead to high blood pressure and thus increasing your risk of stroke.

Make it a  
lifelong  
commitment



*Stroke develops over many years. You should start preventing stroke while you are young.*

## *What you can do to prevent a stroke*

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### **Lower your risk factors**

You can reduce your risk of a stroke by lowering your risk factors:

#### **Control high blood pressure**

If you are over 35, check your blood pressure once a year. If you have high blood pressure, follow your doctor's advice and take any medicine that has been given to you.

#### **Control high blood cholesterol**

Check your blood cholesterol once every 3 years. Blood cholesterol can be lowered by eating healthily, exercising regularly and not smoking. Take your medicines, if any, as instructed by your doctor.



### **Control diabetes**

Check your blood glucose (sugar) levels once every 3 years. If you have diabetes, watch what you eat, exercise regularly and take your medicines as instructed. Have your blood glucose levels checked regularly at home and by your doctor.

### **Adopt a healthy lifestyle**

Make healthy lifestyle your choice:

#### **Stop smoking**

If you smoke, stop now. If you don't, don't start.

### **Stay within a healthy weight range**

You can do this with regular exercise and healthy eating.

#### **Eat healthily**

Eating healthily can lower your risk of becoming overweight or developing high blood pressure, diabetes or high blood cholesterol. Choose food that are low in fat, salt and sugar, and high in fibre. And take at least 2 servings each of fruit and vegetables daily.

#### **Exercise regularly**

Regular exercise helps to control

weight, lower your risk of high blood pressure, diabetes, high blood cholesterol, and also helps you to manage stress better. Engage in 30 minutes of physical activity on 5 or more days a week. Exercise duration may be in a single bout or accumulated through several 10 minute bouts over the day e.g. brisk walking, cycling (leisure).

### **Manage stress better**

Learn to relax (with relaxation techniques, deep breathing exercises, regular exercise, etc) and manage stress more effectively. Attend a stress management class if you need to.

### **Lower alcohol intake**

Have no more than 3 standard drinks a day if you are a male and no more than 2 standard drinks a day if you are a female. One standard drink is approximately equal to:

- 2/3 small can of beer (220ml)
- one glass of wine (100ml)
- 1 nip of spirits (30ml).

### **Don't miss the warning signs of stroke**

A transient ischaemic attack (TIA) is a warning sign of a stroke. However, not all who have a stroke get this warning sign. A TIA happens when blood supply to a part of the brain is temporarily cut off. It may last from a few seconds to up to 24 hours, after which there is complete recovery. Because symptoms of a TIA are often vague and temporary, people tend to ignore them. However, should you have any of the following warning signs, you should see a doctor immediately:



- sudden, unexplained tingling and/or numbness on one side of the body
- sudden weakness or paralysis of the face, arm or leg
- sudden severe headache with no obvious cause
- dizziness or fainting
- blurred vision
- difficulty talking
- stumbling and/or sudden clumsiness.

Early effective treatment of a TIA can help to prevent a stroke from occurring in the future.

# *What to do if someone has a stroke*

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A stroke is an emergency. So if anyone has a stroke, bring him/her to the hospital immediately! The sooner the treatment, the better the recovery. The longer a stroke goes untreated, the greater the damage. Once a part of the brain dies, it cannot be repaired and the effects are permanent.

## **For more information & help**

- ask your family doctor
- call **HealthLine** at **1800 223 1313** (personal advice during office hours)  
**1800 848 1313** (24-hr pre-recorded health information)
- contact the Singapore National Stroke Association at 6358 4138.

# CHRONIC DISEASE MANAGEMENT PROGRAMME

Medical problems like diabetes, hypertension, lipid disorders or stroke are lifelong conditions.

To keep your medical condition(s) under control, just remember **AIM**:

- **A**im to keep a record of your condition
- **I**ncrease your knowledge about the condition
- **M**ake every effort to see your doctor regularly and follow his advice

You can now use Medisave at participating clinics\* to pay for part of your outpatient treatment medical bills for diabetes, hypertension, high blood cholesterol and stroke. For each bill, you will have to pay the first \$30 and 15% of the balance. The remainder of the bill will be paid from Medisave. The annual withdrawal limit from each Medisave account is \$300.

\* Participating clinics will display this sticker.

Use  
**MEDISAVE**  
For Chronic Disease  
Management

For more information, speak to a nurse adviser at 1800 223 1313 (office hours) or visit [www.hpb.gov.sg](http://www.hpb.gov.sg)