

Stroke is a serious problem for the South Asian community. People of South Asian origin in the UK are at a greater risk of stroke than the general population, but the reasons for this are not fully understood. This factsheet explains what a stroke is, the risk factors that affect South Asian people in particular and outlines what you can do to reduce the risk of stroke.

## What is a stroke?

A **stroke** is a **brain attack**. A stroke happens when the **blood supply** to part of the **brain** is **cut off**. This can be because of a **blockage** (called an ischaemic stroke) or because of **bleeding** in the brain (a haemorrhagic stroke.)

A **transient ischaemic attack (TIA)** is very similar to a stroke, but the effects are **temporary** – they may last for a few minutes or up to 24 hours.

## Symptoms of stroke and TIA

The symptoms of stroke and TIA are very sudden. The **FAST** (Face, Arm, Speech) Test can help you to **recognise the symptoms** of a stroke or TIA:

**Facial weakness:** Can the person smile? Has their mouth or eyelid drooped?

**Arm weakness:** Can the person raise both arms?

**Speech problems:** Can the person speak clearly and understand what you say?

**Test** all three signs.

Other symptoms of **stroke** and **TIA** can include:

- **Weakness**, numbness, clumsiness or pins and needles on one side of the body
- Loss of **vision** or blurred vision in one or both eyes
- Slurred **speech** or difficulty finding some words
- Sudden **confusion** or memory loss.

**A stroke is a medical emergency. If you suspect someone may be having a stroke, act FAST and call 999.**

## Who is at risk?

There are **several factors** that can increase a person's risk of stroke. These include **factors we can't change** such as age, gender and family history, **medical conditions** such as high blood pressure, heart disease, diabetes and high cholesterol, and **lifestyle factors** such as smoking, poor diet (for example, high in fat and lacking in fruits and vegetables) and lack of exercise.

People from the **South Asian community** are at a **greater risk of stroke**. They also

have a greater chance of dying from a stroke than the general population in the UK. The **reasons** for this are **not fully understood**, but it may be partly because conditions such as **high blood pressure** and **diabetes** are **more common** in these communities.

## High blood pressure

People from South Asian communities are **more likely** to have **high blood pressure** (also called hypertension). High blood pressure is particularly dangerous as there are **usually no symptoms** and many people who have high blood pressure **do not know**. The only way to tell if you have high blood pressure is to have it **checked**.

Blood pressure is the measure of the **force** with which the **blood** presses on the **artery walls** as it is pumped around the body. It is measured by two numbers: the upper (**systolic**) figure is the pressure when the heart beats; and the lower figure (**diastolic**) is the pressure between heart beats.

**All adults** should have their blood pressure checked at least once every **five years**, **more often** if you have had a **high reading** in the past or if you are already on blood pressure **medication**.

Our blood pressure **varies** throughout the day, for example, it rises if we have been exercising. However, if you are diagnosed with high blood pressure, **your pressure is raised even when you are resting**.

High blood pressure is the **single biggest risk factor** for stroke. It puts a **strain** on blood vessels throughout the body, including the vital arteries to the brain, and the heart

has to work much harder. This strain can cause **vessels** to become **clogged up** or to **weaken**, and this in turn can lead to **narrowing** of the blood vessels and blood clots. More rarely, this **extra strain** may cause **bleeding** in the **brain** due to a burst blood vessel.

The optimum blood pressure is **less than 120/80mmHg**. If your blood pressure is **over 140/90**, then your doctor will probably prescribe **medication** to lower it. If you have had a stroke or a heart attack, or have diabetes, treatment may start **earlier** and the aim will be to reduce your blood pressure to **below 130/80mmHg**.

There are **several types of medication** available to treat high blood pressure. Some of these can cause **side effects** so if you do experience any, **speak to your doctor**, as there are **many alternatives available**. It is very important to **take your medication regularly**. **Do not stop** taking your medication without discussing it with your **doctor** first.

There are also many **lifestyle changes** that can help to lower your blood pressure. They include **giving up smoking**, eating a **healthy diet**, taking regular **exercise**, **drinking sensibly** and reducing your **stress** levels. See factsheet 6, **High blood pressure and stroke**, for further information.

## Diabetes

Diabetes is a **very common problem** in the South Asian community. People from the South Asian community in the UK are **six times** more likely to have diabetes than the

general population, and having **diabetes** can **double** or **triple** your risk of having a stroke.

There are **two** main **types** of **diabetes**. **Type 1** usually begins in **childhood** or **adolescence**. It develops when the **body stops producing insulin**, a hormone produced by the pancreas that helps control levels of glucose in the bloodstream (**blood glucose**).

**Type 2 diabetes is much more common.** It develops when the body produces insulin but is **unable to respond** to its action or when the **body can't produce enough insulin** for its needs.

The **main symptoms** associated with diabetes are **increased thirst, increased urination**, especially at night, **extreme tiredness, weight loss** and **blurred vision**. However, many people **do not experience symptoms** and on average people have Type 2 diabetes for **nine to twelve years** before they are diagnosed.

Diabetes, especially **uncontrolled or untreated diabetes**, can cause **damage** to both the **large and small blood vessels**, resulting in the blood vessel walls becoming stiff, narrow and furred (atherosclerosis). This greatly **increases** the **risk** of **stroke**.

**Diabetes** can be **controlled** by **medication** and **lifestyle changes**. Eating a **healthy diet**, taking regular **exercise** and **losing excess weight** can all help to reduce the risk of developing diabetes and help to control it. See factsheet 15, **Diabetes and stroke**, for further information.

## Cholesterol

Cholesterol is an **essential** part of our bodies, but **high levels** of cholesterol **increase** the risk of **stroke**. Excess cholesterol travels in our blood stream, and can be deposited on the artery walls, narrowing the artery.

Eating a **diet** high in **saturated fats** raises cholesterol levels. Saturated fats are found in **animal products**, such as **red meat**, egg yolk, processed meats and full fat dairy products.

An **ideal cholesterol level is under 5.2mmols** per litre, but if you have had a **stroke**, you will usually be advised to lower your cholesterol to **below 3.5mmol/l**. Eating **less saturated fat** and taking more **exercise** can help to **lower** cholesterol levels. **Statins** are the main type of **medication** used to lower cholesterol. People with **diabetes** have an **increased risk** of **high blood pressure** and **atherosclerosis**, and may be prescribed medication for high cholesterol at an **earlier** stage.

## Reducing the risk of stroke

There are **many things** we can do to improve our health and help reduce the risk of stroke.

### Giving up smoking

Using tobacco, either smoking or chewing tobacco (paan), is **common** in some **South Asian communities**.

Smoking **doubles the risk of stroke** – it causes **arteries** to become **furred up** and it

makes the **blood** more likely to **clot**.

**Stopping** smoking or chewing tobacco can **halve the risk of stroke**, regardless of **how old** you are or **how long** you have been using it. Giving up is not always easy but there is a lot of **help and support** available.

There are many **books** and **leaflets** available for **tips** and **advice** on giving up. Your **doctor** can also help you with details of **stop-smoking groups** and **nicotine replacement therapy** such as patches and gum. (**Please note** this may not be suitable for you if you have already had a stroke.) See factsheet 19, **Smoking and stroke**, for further information.

### Drink sensibly

In small amounts, alcohol may be beneficial in helping to reduce heart disease, but **regularly drinking large amounts** of alcohol **can raise blood pressure** to **dangerously high levels**, which then increases the risk of **stroke**.

The current **recommended guidelines** from the Department of Health for safe drinking is a **maximum of three to four units** of alcohol **a day for men**, and a maximum of **two to three units a day for women**. A **unit** is equivalent to:

- Half a pint of ordinary strength (4%) lager, beer or cider
- A pub measure of spirit, such as gin, vodka or whisky
- A small glass of wine.

It is also beneficial to have a couple of **alcohol free days** during the week. For

more information, see factsheet 13, **Alcohol and stroke**.

### Take regular exercise

Taking **regular exercise** can help to **lower blood pressure**, improve the body's ability to handle **insulin**, improve **cholesterol** levels and create a sense of **well-being**.

Studies have shown that **30 minutes** activity on **five days** a week can **improve your health**. You need to get **slightly out of breath** and feel a small increase in your heart rate. Activities such as **walking**, **gardening** and **swimming** are all good forms of exercise. You don't have to do it all in one session – it is just as good to exercise **a few times** a day, as long as it **adds up** to at least **30 minutes**.

### Watch your weight

Being **overweight** or **obese** can **increase the risk of stroke**. Carrying extra weight around your **waist** is particularly important and may increase the risk of stroke by up to **three times**. **Men** in general tend to carry weight around their **waist** and studies have shown that although levels of **obesity** are **low** for men in most **South Asian groups**, they still have **high waist to hip ratios**, therefore **carrying more weight** around their waists. **South Asian women** do have **higher rates of obesity** and, unlike most European women, tend to **carry their weight around their waist**.

Eating a **healthy diet**, particularly cutting down on the amount of **fat** you eat, and taking **regular exercise** can help you to

**lose weight.** See your doctor for further guidance.

## Healthy eating

Eating a **healthy diet** reduces the risk of a number of diseases including **stroke**. It can also help us to **lower blood pressure, lose weight** and control **diabetes**.

The **South Asian diet** includes a **healthy variety of foods** but there can be high levels of **fats, sugar** and **salt** in certain dishes. Small changes in our diets can make them even **healthier** and help us to reduce the risk of **stroke**.

## Fruits and vegetables

**All fruits and vegetables** are excellent sources of **vitamins** and **minerals**. They are an essential part of a healthy diet and we should aim to **eat at least five portions a day**. A **portion** is roughly a **handful** (for example, one apple, two plums or a heaped tablespoon of peas). **Different coloured** fruits and vegetables contain different vitamins and minerals so try to eat a **variety** of fruits and vegetables with a **rainbow** of colours. Many studies have shown that **eating plenty of fruits and vegetables reduces the risk of stroke**. Just increasing your intake by **one extra portion** can reduce the risk of **stroke** by around **six per cent**.

## Carbohydrates

**Carbohydrates**, such as potatoes, rice, pasta and breads such as chapati, should also make up a **large part** of our diet.

**Wholegrain** foods, such as brown rice, wholewheat bread and oats, are **much**

**better** for us than **refined** food such as white bread. They are a valuable source of **fibre** and **B vitamins**, and eating **three servings** a day can almost **halve** the risk of stroke.

## Meat, fish and alternatives

Eat **one to two** portions of meat, fish and alternatives, such as beans and pulses (including lentils), each day. Choose **lean meat** and **trim** all visible fat from them.

**Oily fish** and **nuts and seeds** are rich in **vitamin E** which can help lower the risk of **atherosclerosis** so include them in your diet if you can.

## Milk and other dairy foods

Eat **two to three portions** of these foods each day. They include milk, cheese, paneer and yoghurt. Choose **low fat** products where possible, as full fat dairy products such as hard cheese contain a lot of **saturated fat**.

## Fats and Sugars

Foods in this group include butter, ghee, cooking oils, mayonnaise, cakes, biscuits and Asian sweets, and should make up only a **very small part** of our diet.

## Salt

Too much salt in our diet can lead to **high blood pressure**, a major risk factor for stroke. In the UK, we eat about **8–11g of salt a day**, whereas the **maximum recommended** intake is **6g a day**. This is equivalent to around one teaspoon.

A lot of our salt intake comes from **everyday foods** such as bread, breakfast cereals and pickles. Try to cut down on using salt in **cooking** and at the **table**.

### Healthy eating tips

- Remember **frozen, canned** and **dried** fruits and vegetables all count towards your five portions a day.
- Have **one glass of fruit juice** a day (pure juice, not a flavoured juice drink). Citrus fruits such as oranges can protect against stroke.
- **Bake**, grill or boil foods rather than frying them.
- **Read the label** – check foods for the amount of **salt, sugar** and **saturated fat** they contain.
- **Watch out for “light”, “lite” or “diet” foods** – these foods are not necessarily healthier options as the terms are not regulated.
- Cut down on **fried foods** such as samosas, pakoras, chips and fried breads.
- Don't add **butter or ghee** to breads or chapatis.
- Try replacing ghee and butter with **olive oil or nut/seed oils**.
- When using oil, **measure** it out rather than guessing. One tablespoon can be used for most curry dishes.
- Use **low fat** versions of dairy products. Reduce the amount of **paneer** you eat – it is very high in fat.
- Save **Indian sweets** such as kulfi, halva and burfi for special occasions as they contain high levels of fat and sugar.
- Choose lower fat **salad dressings** to keep salads healthy.
- **Cut down the amount of salt** you add to food in cooking and at the table **gradually**, in time you will not notice the difference.
- Flavour food with other **spices**, herbs, lemon juice or vinegar instead of salt.
- Cut down on **salty snacks** such as crisps, Bombay mix and salted nuts, which are often high in fat too.
- When buying tinned foods, choose those with **no added salt**.
- Salt is hidden in processed foods, appearing as sodium, monosodium glutamate (E621) or sodium bicarbonate. **Multiply** sodium content in foods by **2.5** to get the total salt content. A low sodium content is 0.3g per 100g or less.
- See factsheet 8, **Diet and stroke**, for more information on cholesterol, salt and healthy eating.

### Useful contacts

#### The Stroke Association

We provide information and support on all aspects of **stroke**, including prevention. Our **Preventing a stroke** leaflet is available in Bengali, Gujarati, Hindi, Punjabi and Urdu. We also have access to a **free translation service** on our **helpline**.

#### Stroke Helpline: 0845 3033 100

Open Monday–Friday, 9am–5pm, answerphone outside these hours.

Email: [info@stroke.org.uk](mailto:info@stroke.org.uk)

Website: [www.stroke.org.uk](http://www.stroke.org.uk)

**Blood Pressure Association**

60 Cranmer Terrace  
 London SW17 0QS  
 Tel: 020 8772 4994  
 BP Infoline: 0845 241 0989 (11:00am-  
 3:00pm Mon-Fri)  
 Website: [www.bpassoc.org.uk](http://www.bpassoc.org.uk)

**Diabetes UK**

Macleod House, 10 Parkway,  
 London NW1 7AA  
 Tel: 020 7424 1000  
 Fax: 020 7424 1001  
 Email: [info@diabetes.org.uk](mailto:info@diabetes.org.uk)  
 Website: [www.diabetes.org.uk](http://www.diabetes.org.uk)  
 Information is available in other languages.

**NHS Smoking Helpline**

Tel: 0800 022 4 322  
 Website: <http://smokefree.nhs.uk>

**NHS Asian Tobacco Helplines**

Open Tuesday, 1pm–9pm.  
 Answerphone out of hours and call-back  
 service offered.

Urdu:	0800 169 0881
Punjabi:	0800 169 0882
Hindi:	0800 169 0883
Gujarati:	0800 169 0884
Bengali:	0800 169 0885

**Quitline**

Smoking Helpline: 0800 00 22 00  
 Website: [www.quit.org.uk](http://www.quit.org.uk)

**Ethnic Tobacco Helplines**

All lines open Tuesday, 1pm–9pm:  
 Bengali (Mon): 0800 00 22 44  
 Gujarati (Tue): 0800 00 22 55  
 Hindi (Wed): 0800 00 22 66  
 Punjabi (Thu): 0800 00 22 77  
 Urdu (Sun): 0800 00 22 88

For further information, phone the Stroke Helpline on 0845 3033 100,  
 email [info@stroke.org.uk](mailto:info@stroke.org.uk) or visit our website [www.stroke.org.uk](http://www.stroke.org.uk)  
 If you are unhappy about any aspect of The Stroke Association,  
 please make your views known to us immediately. We will happily  
 discuss any issues and how they can best be resolved.



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