

## Non-communicable diseases: a growing challenge



Jim Loring / Tearfund

Regular health checks, like these in Sierra Leone, can help to detect the early signs of disease.

'The rise of chronic non-communicable diseases presents an enormous challenge ... Non-communicable diseases deliver a two-punch blow to economies and development. They cause billions of dollars in losses of national income, and they push millions of people below the poverty line, each and every year.'

Dr Margaret Chan, Director-General, World Health Organization

Non-communicable diseases (NCDs) cannot be caught but instead develop because of both genetic (inherited through your family line) and lifestyle factors. The four main NCDs – heart disease, cancer, chronic obstructive pulmonary disease (lung diseases known as COPD) and diabetes – are the biggest cause of death worldwide. More than 36 million people die each year from NCDs (63 per cent of global deaths), including nine million who die before the age of 60. More than 90 per cent of these early deaths are in developing countries and most could be prevented.

Heart disease causes the most NCD deaths (17 million per year), followed by cancer (7.6 million), COPD (4.2 million) and diabetes (1.3 million). Together, these four diseases cause 80 per cent of all NCD deaths.

### A burden on communities

For people living in poverty, NCDs can have a serious impact. People often suffer with NCDs for many years, causing families to face a large financial burden, as well as the distress of the disease itself. In many cases, the person who is ill cannot work, or can only work part-time, whilst other family members are also needed at home to care

for them. The cost of medical care can also push families into debt.

Economic growth is affected because if people are ill, they do not contribute to the economy. Many governments are realising that preventing NCDs is an important way of reducing poverty.

### Shared risk factors

The four main NCDs share four common risk factors which increase the chance that a person will develop heart disease, diabetes, cancer or COPD:

- tobacco use
- physical inactivity
- the harmful use of alcohol and
- poor diet.

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*Footsteps* is a paper linking health and development workers worldwide. Tearfund, publisher of *Footsteps*, hopes that it will provide a stimulus for new ideas and enthusiasm. It is a way of encouraging Christians of all nations as they work together towards creating wholeness in our communities.

*Footsteps* is free of charge to grassroots development workers and church leaders. Those who are able to pay can buy a subscription by contacting the Editor. This enables us to continue providing free copies to those most in need.

Readers are invited to contribute views, articles, letters and photos.

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**Tearfund** is a Christian relief and development agency building a global network of local churches to help eradicate poverty.

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If the major risk factors for NCDs were no longer present, it would prevent around 75 per cent of heart disease and diabetes, and 40 per cent of cancer.

## Global action

In September 2011, the United Nations held the first high-level meeting on NCDs to set a new global agenda and call for action. It brought together Heads of State and Government, parliamentarians, Non-Governmental Organisations (NGOs), academics and networks working on the prevention and control of NCDs. The Secretary-General of the United Nations, Ban Ki-moon, recognised the great challenge ahead. 'This will be a massive effort, but I am convinced we can succeed,' he said in his speech to the opening session.

The World Health Organization (WHO) believes that the cost of significantly

reducing the rates of NCDs in low-income countries would be US\$1-3 per person, making this a very low-cost way of increasing life expectancy. NCD cases are expected to increase significantly over the next decade so urgent action is needed.

## What can we do?

At community level, health workers, churches and other community groups can carry out health promotion and education about the main shared risk factors. They can also provide support for people who want to change their lifestyles, for example by stopping smoking or improving their diets. Individuals can play their part by becoming champions of better health and making healthy living attractive to those around them.

*For more information about how NCDs are being put on the world agenda, visit the NCD Alliance website: [www.ncdalliance.org](http://www.ncdalliance.org)*

## EDITORIAL



Alice Keen  
Editor

When I was a small child, my grandmother was looking after me when she started to feel unwell. She called a neighbour who quickly recognised the signs of a heart attack and called an ambulance. Thankfully my grandmother survived, partly due to her neighbour's quick thinking.

Many of us will have watched someone in our community suffer with a non-communicable disease (NCD) like heart disease, cancer, diabetes or a chronic respiratory disease. In fact, NCDs are the biggest cause of death in the world today and are a growing problem.

As I've edited this issue, what has caused me grief, but also given me hope, is that many of these diseases are preventable. You can read about how to reduce your risk of developing NCDs on our centre spread (page 8), how to eat healthily (page 3) and how to share health

messages (page 14). Many lives could be saved by people learning how to respond to a heart attack or stroke, like my grandmother's neighbour did (page 16).

We can also learn to care for those who are suffering and help to improve their lives. Many people with diabetes lose limbs due to the disease so we have featured wheelchairs in this edition. There is also a Bible study reflecting on how to love those who are drawing to the end of their lives and show them the love which Jesus himself modelled to us.

I hope you will find this issue interesting and will share it with others. As I take on the editorship from Helen Gaw while she looks after her new baby boy, it is with a great sense of privilege. I am humbled by all the work which our many readers do throughout the world and love hearing your stories of transformation.

Alice

# Healthy eating

by Dr Ann Ashworth

## The 'double burden' of disease

Many low- and middle-income countries are facing a 'double burden' of disease. They continue to have the old problems of infectious diseases, but at the same time are experiencing a rapid increase in non-communicable diseases such as diabetes and heart disease. Being overweight is one of the underlying factors.

It is now common to find communities where under-nutrition and overweight exist side by side, particularly in urban areas. Families often change their eating habits when they move to towns and cities. They may save time on cooking by buying ready-to-eat convenience foods, or processed foods. These foods often contain high amounts of fat and/or sugar, which make them tasty but full of hidden calories (energy). Consuming more energy than a person needs leads to them becoming overweight.

Urban diets usually contain more salt and less fibre than traditional diets. Living in cities may also decrease physical activity because people have less physically demanding jobs and can use public transport or cars, rather than walking. Physical inactivity reduces the amount of energy a person needs, making overweight more likely.

## What is overweight?

Overweight is when there is too much fat in the body. A quick way to check



Green vegetables are an important part of a healthy diet.

for overweight is to measure waist circumference. A woman is usually overweight if her waist is 80cm or more. For a man, the figure is 94cm or more. (See page 4 for a diagram illustrating this.)

## Attitudes to being overweight

In South Africa, women's responses to 'being large' included: 'If you are large, you have a presence and can be easily seen' ... 'People know you are healthy (i.e. are not HIV positive)' ... 'Husbands prefer fat women'. Attitudes were overwhelmingly positive towards overweight and the risks were not recognised. Yet the consequences of being overweight can be life-threatening.

Being overweight increases the risk of heart disease (including stroke), diabetes, osteoarthritis (a disease of the joints) and some cancers (uterus, breast and colon).

Clearly we need to change attitudes about being overweight and increase awareness about these serious risks. However we should be sensitive when communicating with individuals about their weight.

## What is healthy eating?

It is a diet that maintains a healthy weight in adults, enables healthy growth in children, has a variety of foods and provides enough energy and nutrients.

## Tips for healthy eating

- Eat a variety of foods at each meal
- Eat wholegrain cereals, legumes (e.g. peas, beans, lentils) and nuts
- Eat plenty of fruits and vegetables
- Limit the amount of fats, oils and fatty foods
- Limit the amount of sugar and sugary foods
- Eat less salt.

## Health in pregnancy: avoiding low birth weight

Low birth weight increases the risk of death during infancy. It also increases the risk of high blood pressure, heart disease and diabetes in adult life. To avoid low birth weight, pregnant women should eat healthily and:

- avoid long gaps between meals (snacking is good)

- not take part in religious fasts
- not smoke or chew tobacco
- avoid alcohol.

Malaria in pregnancy also decreases birth weight. In endemic areas advise pregnant women to sleep under an insecticide-treated net and receive IPT (intermittent preventive treatment) at the antenatal clinic.



### WHY EAT A VARIETY OF FOODS?

This helps ensure that all essential nutrients will be present. For example, staple cereals like wheat and rice contain no vitamin A, vitamin C or vitamin B<sub>12</sub> so these need to be provided from other foods. These vitamins help to give you good vision, normal growth and development. They are also important in fighting infections, healing wounds and making blood cells.

### WHY EAT WHOLEGRAIN CEREALS, LEGUMES AND NUTS?

- To provide soluble fibre which helps lower cholesterol and reduces the risk of heart attack and stroke
- To provide insoluble fibre to keep the gut healthy and reduce the risk of bowel cancer.

Choose brown bread, brown rice, oatmeal or rolled oats, bulgur wheat or quinoa.

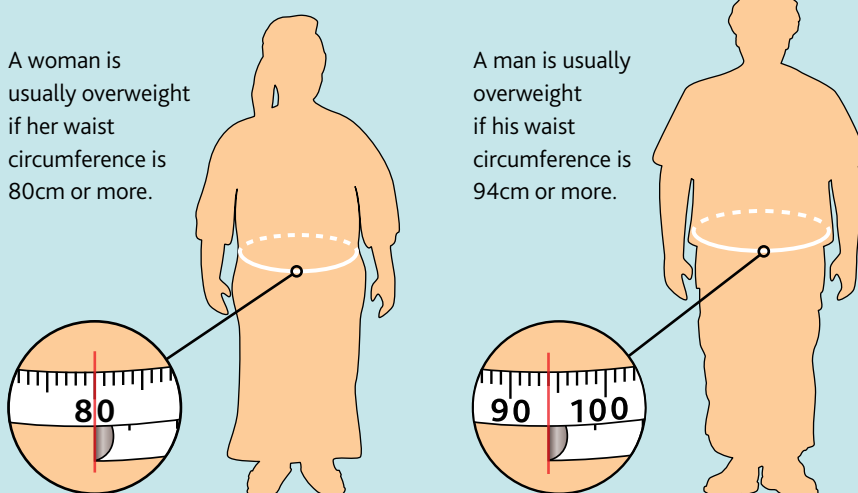
### WHY EAT PLENTY OF FRUITS AND VEGETABLES?

- To provide minerals and vitamins that may be lacking in the main diet
- To provide anti-oxidant nutrients which reduce the risk of cancer
- To provide soluble and insoluble fibre.

Aim to have five portions of fruit and vegetables a day. Potatoes, yam, cassava and plantain do not count as a portion.

## How to measure overweight

You can measure a person's waist with a tape measure.



A woman is usually overweight if her waist circumference is 80cm or more.

A man is usually overweight if his waist circumference is 94cm or more.

### WHY LIMIT FATS, OILS AND FATTY FOODS?

- To reduce the risk of becoming overweight. These foods are concentrated sources of energy and make it more difficult to maintain a healthy weight.
- To reduce the risk of heart attacks and stroke. Saturated fats increase 'bad' cholesterol in the blood and increase the risk of heart disease. They are found in dairy foods (butter, cheese, cream, whole milk), fatty meat, lard, ghee, hard margarine, coconut and red

palm oil. Some foods (biscuits, cakes, pastries) contain hidden saturated fats.

For cooking, choose soya, groundnut, sunflower, olive, rapeseed, safflower, corn, or blended vegetable oils.

### WHY LIMIT SUGAR AND SUGARY FOODS?

- To reduce the risk of becoming overweight. These foods are concentrated sources of energy. Sodas and bottled drinks contain lots of hidden sugar.

### WHY EAT LESS SALT?

- To reduce the risk of high blood pressure, which increases the risk of heart disease and stroke.

Some foods contain hidden salt, including cheese, processed meat, packet and canned soups, stock cubes (for soups etc), processed snacks and ready-to-eat meals. Try not to add salt at the table. However your body does need some salt to work well, particularly in very hot climates where you lose salt through sweating. You may become dizzy or faint if you do not have enough salt in your diet.

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## Discussion questions

- What staple foods do we eat in this area? (A staple food is the main food eaten. Examples are rice, maize, cassava, yam, plantain.)
- Which other foods do we usually eat with the staple food? Now check if these foods include pulses, nuts, vegetables, fruit, meat, fish. If not, consider why not.
- How many types of fruit and vegetables (including green leaves) are available in our area? How could a person achieve five portions a day?
- How many portions a day of fruit and vegetables do we currently eat in our area? Discuss ways to encourage families to eat five portions a day.
- How much is lack of money a barrier to a healthy diet?
- Discuss ways in which families could improve the variety of foods eaten at little or no cost.
- Are there times of the year when fruits and vegetables are not available? What can families do to overcome seasonal shortages?
- Are wild plants eaten traditionally as a source of fruit or green leaves in our area? Should eating these be encouraged?

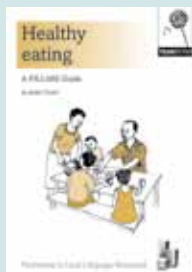
The PILLARS guide on Healthy Eating contains more discussion questions like these. See page 5 for details.

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## PILLARS – Healthy Eating

This Tearfund guide contains ideas to help improve household nutrition at low cost – food groups, kitchen gardens, recipes, methods of food preservation and hygiene. It explores the importance of a good diet in maintaining health and resisting disease, as well as the nutritional needs of pregnant and breast-feeding mothers, young children and older people. The PILLARS series provides practical, discussion-based learning on community development. The Guides are designed for use in small community groups such as youth groups, church groups, women's groups, farmer groups and literacy groups. A trained leader is not required; just one literate person who can act as facilitator and lead the group in discussions. To download a copy visit [www.tearfund.org/tilz](http://www.tearfund.org/tilz)



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## Global Poverty Prayer Movement 2012

From Sunday 26 February to Sunday 4 March 2012, there will be a week of focused prayer about global poverty. You can participate from anywhere in the world.

Visit [www.tearfund.org/onevoice](http://www.tearfund.org/onevoice) to find out more or write to us here at *Footsteps*.

## WHO Wheelchair Guidelines

These guidelines were developed for use in less resourced settings. They cover the design, production, supply and service delivery of manual wheelchairs, in particular for long-term wheelchair users. The guidelines and related recommendations are useful for those who work with wheelchairs, including policy-makers; providers and users of wheelchair services; designers, purchasers, donors and adapters of wheelchairs; representatives of disabled people's organisations, as well as individual users and their families. Available in multiple languages.



To download a copy visit [www.who.int/disabilities/publications](http://www.who.int/disabilities/publications)

## Stop the global epidemic of chronic disease: A practical guide to successful advocacy

This handbook is a guide and practical tool for all advocates, regardless of experience. You may work in a government ministry, in a professional or non-governmental organisation, be a health care professional, a journalist, or simply be a concerned individual.



Although this handbook focuses on non-communicable disease prevention and control, the underlying principles for effective advocacy described can be applied to other health topics, such as health promotion.

The guide can be downloaded or ordered by post. Please contact  
Chronic Diseases and Health Promotion  
World Health Organization  
Avenue Appia 20  
CH-1211 Geneva  
Switzerland  
E-mail: [chronicdiseases@who.int](mailto:chronicdiseases@who.int)  
Website: [www.who.int](http://www.who.int)

## Useful organisations and websites

**Hesperian Health Guides** is a non-profit publisher of books and newsletters for community-based health care. For a catalogue or to order books in English or Spanish visit [www.hesperian.org](http://www.hesperian.org) or write to:  
Hesperian Health Guides, 1919 Addison Street, Suite 304, Berkeley, CA 94704, USA  
Email: [bookorders@hesperian.org](mailto:bookorders@hesperian.org)

**TALC (Teaching Aids at Low-Cost)** distributes books and teaching aids across the world to support grassroots health and community workers.

To order books, visit [www.talcuk.org](http://www.talcuk.org) or write to: TALC, PO Box 49, St Albans, Herts, AL1 5TX, United Kingdom

**Community Health Global Network** resources, supports and connects community health workers, pastors, community leaders, academics and health care professionals. Clusters are being set up in various countries which link local programmes together.  
Website: [www.chgn.org](http://www.chgn.org)

**[www.tobaccoatlas.org](http://www.tobaccoatlas.org)** Maps, data and advice on health promotion

**[www.who.int/topics/tobacco](http://www.who.int/topics/tobacco)** World Health Organization section on tobacco

**[www.tme.org.uk](http://www.tme.org.uk)** Resources for community health education in 50 languages

## Your feedback on the tilz website

- Have you visited Tearfund's International Learning Zone yet?
  - How has it helped you?
  - What could be improved?
- Write to us to let us know.

# Tobacco control at the community level

by Dr Nathan Grills



Ralph Hodgson / Tearfund

Many people smoke self-rolled cigarettes like this woman in Tikapur, Western Nepal.

In terms of global threats, tobacco is one of the biggest dangers in the world today. In 2010, more than five million people died from the effects of smoking or chewing tobacco. This is not just a disease of the rich. According to the World Health Organization (WHO), 80 per cent of these deaths were in low- and middle-income countries. Tobacco remains the only legally available consumer product that will kill at least a third of all users.

## Smoking facts

**Passive smoking** or second hand smoke is when people are exposed to the harmful effects of smoking by sharing space with a smoker or another source of smoke, such as an indoor cooking fire. These passive smokers have a higher risk than other non-smokers of developing cancer and COPD.

**Smoking in pregnancy** is harmful to the baby, as well as the mother. It has been linked to miscarriages and other complications. Often, it leads to low birth weight which gives the child a higher risk of diabetes and heart disease later in life.

As a doctor I have had to tell many patients that they have lung cancer and also counsel families who have lost loved ones as a result of tobacco-related illness. One of the main reasons I moved from clinical medicine to public health was that I was distressed that so many of these deaths could have been prevented.

## Low cost, high impact

The cost effectiveness of tobacco control is clear. Since tobacco kills at least one in three of its users, if you cause three people to stop smoking through health education and support, you will have saved at least one life! To make a comparison: an immunisation programme may require 150

immunisations to prevent one death. It is clear that spending on tobacco control is a good investment.

The interventions that have been shown to be most effective include: increasing the price of tobacco through taxation, regulating the advertising of cigarettes, mass social marketing designed to change behaviour and banning smoking in public spaces.

Some *Footsteps* readers may be able to lobby governments for taxation changes and laws banning tobacco but we can all be involved in reducing tobacco use at a community level.

## Northern India: Reducing tobacco consumption at a local level

### JOINING TOGETHER TO LOBBY AND INFLUENCE

Whilst it is difficult as individuals or small organisations to lobby governments, the Community Health Global Network (CHGN) Uttarakhand Cluster of North India has brought together 37 community health programmes to advocate on tobacco. We began by undertaking an awareness campaign and we are now developing a comprehensive tobacco control and cessation initiative. By linking together, the group produced an awareness DVD, involved the health minister and had a high-profile launch. Together we had a stronger voice against tobacco.

The cluster also mobilised international support to reduce tobacco use. The Cluster Tobacco Control Initiative (CTCI) was developed in consultation with tobacco control experts in Australia and has three main parts: a school tobacco action campaign, a community awareness/social marketing campaign and a cessation services programme.

### USING COMMUNITY HEALTH WORKERS OR VOLUNTEERS

Smoking rates tend to be higher amongst the poorer and less educated people in rural areas. Many of our community health programmes have health and outreach workers to target such groups. These workers are often more effective at getting messages to rural and marginalised communities than mass advertising using

television or billboards. Where there is both low knowledge and high rates of smoking (such as in Uttarakhand, India), studies have shown that many will stop smoking immediately as soon as they understand the dangers of tobacco.

In the CTCI each member organisation selects one or two master trainers. These forty trainers are then responsible for delivering training to over 3000 health workers and volunteers as Tobacco Control Advocates. This provides one advocate for each village in our area of northern India and allow wide coverage all the way to the grassroots.

### IDEAS FOR LOCAL ANTI-TOBACCO CAMPAIGNS

- General awareness-raising through developing relevant local anti-tobacco posters, organising community festivals or creating DVDs to raise awareness about the dangers of tobacco.
- Training health workers about tobacco cessation. There are excellent materials

### Quit-to-win community events

At a community festival CHGN Uttarakhand Cluster offered US\$25 to three volunteers if they stopped smoking and remained so for six months. That would be equal to one life saved as long as they continue as non-smokers. Such 'Quit-to-win' programmes

can be effective and those who quit can in turn become 'quit champions' in their communities and in turn lead more people to stop smoking. Following the event, at least four other people followed their lead and stopped smoking.

available that teach on the dangers of smoking. Simple advice and support from respected health practitioners has been shown to be effective.

- Focusing on schools work as children are particularly vulnerable to starting smoking. Since tobacco is highly addictive it is easier to 'stop people starting' than to help them stop once they have already started. You could run a competition at school for the best anti-tobacco advertisement or help children themselves to spread anti-tobacco messages and discourage tobacco use in their communities.

### SPREAD THE MESSAGE, SAVE LIVES

Tobacco causes a range of serious health problems and for one in three people who smoke, their habit will kill them. It is important that we do not stay silent about the dangers of smoking. Examples from northern India show that basic education and advocacy around this issue can save lives.

*Dr Nathan Grills, from the University of Melbourne, is a Public Health Physician who works in tobacco control and preventative health in India under the Emmanuel Health Association, the CHGN Uttarakhand Cluster ([www.chgnukc.org](http://www.chgnukc.org)) and the Public Health Foundation of India. Email: [ngrills@unimelb.edu.au](mailto:ngrills@unimelb.edu.au)*

## BIBLE STUDY In the midst of suffering

by Jane Bates

Bring to mind a time when someone, perhaps a family member or someone in your community, was suffering from an incurable disease.

### Reflection

- What do you remember of that time?
- How did that experience make you feel?

### Read Psalm 38

- How is the Psalmist's life affected by his suffering?
- Can you identify with any of these areas?

This Psalm is not specifically about someone suffering with an incurable disease. But the physical, moral, social and emotional pain expressed by the Psalmist reflects some of the experiences and feelings of people with long-term illness. His final cry is that the Lord should not leave him, but should come quickly to help him (v 21-22).

Palliative care seeks to address pain – physical, psychological, social and spiritual – and other symptoms, for those with progressive incurable diseases. It requires the involvement of many different individuals – starting with

the patient; including health workers and others, working closely with family members. In our work in Malawi, traditional authorities (chiefs) and spiritual leaders also play an important role in finding carers for patients who are discharged from hospital.

### Finding hope

Dame Cicely Saunders – the founder of the modern hospice palliative care movement – said: 'you matter because you are you, you matter until the last moment of your life and we will do all that we can to help you to live until you die.'

### Read 1 Corinthians 15:9-22, 2 Timothy 1:10

- What difference does it make to face suffering with Jesus?

Many of us find it hard to spend time with those who are living with an incurable condition. Maybe we feel we don't have much to give, maybe it reminds us too clearly that we are all mortal.

Christians have a lot to offer people who are struggling with incurable disease. We know a clear hope beyond the here and now: the firm promise of eternal life with God. We may or may not have the chance to share this hope with those who suffer but it can help us to support those in need, leading us towards, rather than away, from them.

### Read John 11:25-26

- How did Jesus face suffering?
- How can we follow his example in our own lives?

In his hour of greatest need in the garden of Gethsemane, Jesus asked his disciples to watch and pray. For many people watching ('being present with') and praying can be ways for us to show love and bring hope, pushing away the clouds of despair and depression which can accompany a failing body. Jesus' love never fails and continues even beyond the grave.

*Jane Bates is a palliative care physician in Blantyre, Malawi. Website: [www.palliativecaresupport.org](http://www.palliativecaresupport.org)*



# Staying healthy

## Reducing your risk of developing non-communicable diseases

The four main non-communicable diseases (NCDs) share common risk factors. Tobacco use, an unhealthy diet, physical inactivity and harmful use of alcohol can lead to heart disease, cancer, diabetes and chronic obstructive pulmonary disease. Read more about recognising the signs of NCDs and how to help to prevent yourself and others from developing these diseases.

### Cancer

Cancer is a general term for a large group of diseases that can affect any part of the body. Cancer happens when cells start to grow abnormally beyond their usual boundaries. This abnormal growth can then spread to other organs.

#### Symptoms

There are over 200 different types of cancer with a variety of symptoms. However some common symptoms include unexplained weight loss, persistent cough, a lump somewhere on the body (particularly in the breasts), unexplained tiredness, difficulty passing urine, changes in bowel movements, skin changes (particularly changes in skin moles) and abnormal bleeding.

**PLEASE NOTE:** These symptoms may have other less serious causes but if they do not go away you should seek medical advice.

**Number of deaths per year worldwide: 7.6 million**

### COPD

COPD stands for chronic obstructive pulmonary disease. This is a term used for a number of conditions which affect breathing; including chronic bronchitis and emphysema. Patients with COPD have damaged airways in the lungs which have become narrower, making it harder for air to get in and out of the lungs. The word 'chronic' means that the problem is long-term. Most cases of COPD are caused by tobacco use.

**PLEASE NOTE:** The symptoms of COPD are similar to tuberculosis (TB). Anyone who has had a cough for more than three weeks should be tested for TB, particularly in areas where HIV is common.

#### Symptoms

Cough, phlegm and shortness of breath. Some people may only notice their symptoms in colder weather, or they might put them down to bronchitis or 'smoker's cough'.

**Number of deaths per year worldwide: 4.2 million**

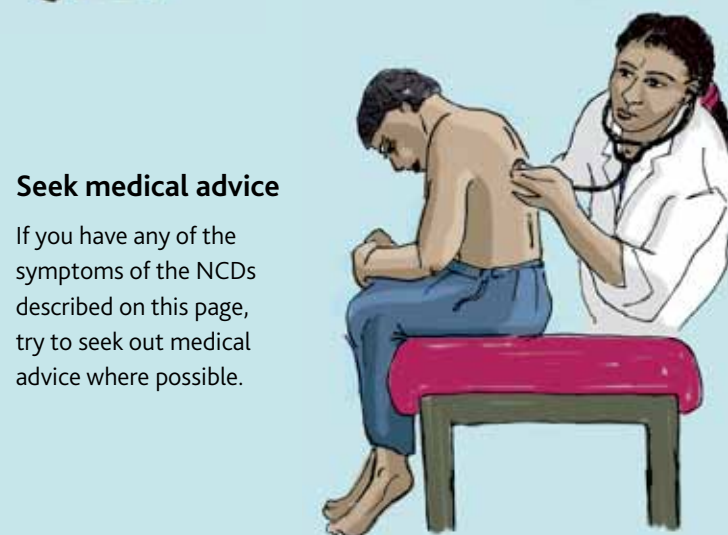
#### Don't smoke

Even light smoking (1–5 cigarettes a day) will increase your risk of having a heart attack by 40 per cent. Twenty cigarettes a day will increase your risk by 400 per cent. From the moment that you stop smoking your risk of developing the four main NCDs will reduce.



#### Be active

You may walk a lot as part of your everyday life or do physically demanding work but if you are not exercising regularly then try to start with some simple steps. Doing 30 minutes of moderate exercise five times a week will significantly reduce your risk of a heart attack.



#### Seek medical advice

If you have any of the symptoms of the NCDs described on this page, try to seek out medical advice where possible.

#### Eat a healthy diet

In different parts of the world, the staple diet might look different but it is important to avoid too much fat and salt in your everyday food. Fruit and vegetables should form a major part of your diet. (Read more about healthy eating on page 3.)



#### Only drink alcohol in moderation

If you do drink alcohol, do so in moderation. Don't drink more than the recommended weekly allowance. This allowance varies depending on your gender and weight as well as the strength of the alcohol. For more information, ask a local medical professional.



#### Think about risk

As you get older your risk of developing NCDs increases. Family history also plays a role. If one of your parents has suffered from an NCD then you should take special care to reduce risk of that disease. Some diseases may be more common for people from specific ethnic groups.

### Diabetes

Diabetes is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces. Insulin is a hormone that regulates blood sugar. Hyperglycaemia, or raised blood sugar, is a common effect of uncontrolled diabetes and over time leads to serious damage to many of the body's systems, especially the nerves, kidneys, eyes and blood vessels. There are two types of diabetes:

- **Type 1** usually develops before the age of 40, especially in childhood. Five to 15 per cent of people with diabetes have Type 1 diabetes.
- **Type 2** usually develops later in life and shares common risk factors with other NCDs.

#### Symptoms

Undiagnosed diabetes can cause extreme tiredness, passing urine more often than usual (especially at night), increased thirst, unexplained weight loss, genital itching or regular episodes of thrush, slow healing of cuts and wounds and blurred vision.

**Number of deaths per year worldwide: 1.3 million**

### Heart disease

Heart attacks and strokes usually happen suddenly and are mainly caused by a blockage that prevents blood from flowing to the heart or brain. The most common reason for this is a build-up of fatty deposits on the inner walls of the blood vessels that supply the heart or brain. Strokes can also be caused by bleeding from a blood vessel in the brain or from blood clots.

#### Symptoms

Often, there are no symptoms of heart disease. A heart attack or stroke may be the first warning of underlying disease. Certain types of heart disease cause shortness of breath, tiredness, irregular heart beats, chest pain and fainting.

**Number of deaths per year worldwide: 17.1 million**

Statistics: World Health Organization (WHO) – [www.who.int](http://www.who.int)



# Living with diabetes

This article focuses on 'Type 2 Diabetes' which in most cases develops in adults due to a combination of genetic and lifestyle factors. On the centre spread (page 9), you can read about the symptoms and risk factors associated with diabetes.

## An emerging global epidemic

In 2010, the World Diabetes Foundation estimated that 285 million people were living with diabetes. That means that six out of every 100 people in the world are affected by this disease. The number is expected to grow to 438 million by 2030.

## A leading cause of disability

Diabetes could become one of the world's leading causes of physical disability over the next decades. Diabetes leads to many serious health conditions. People suffering

from diabetes can often experience loss of sensation in their feet. Even the smallest injury can lead to infection which, if not treated promptly, may lead to serious complications. Diabetes now causes a high proportion of all leg amputations.

If left undiagnosed, diabetes can lead to permanent damage to the eyes and, in some cases, to blindness. Your eye has a lens and an opening at the front which adjust to bring objects into focus on the retina at the back of the eye. The retina is made up of delicate tissue that is sensitive

to light rather like the film in a camera. The centre of the retina is a small area called the macula. It is vital because it enables you to see fine detail. The medical name for the damage caused to the retina by diabetes is diabetic retinopathy.

## Diagnosis

It is very important that people find out that they have diabetes as early as possible to avoid the serious damage which the disease can cause. If you notice symptoms of diabetes (see page 9) in yourself or in a friend or relative, you should seek medical help. If you are diagnosed with the disease, doctors can give you advice on how to manage the disease and continue to live a healthy and active life.

*For more information on diabetes visit the International Diabetes Federation website: [www.idf.org](http://www.idf.org)*

## Practical guides

### Eyes

Diabetes can affect your eyes and sometimes lead to blindness.

- If possible you should have regular eye tests to check your retina for damage.
- Managing your diabetes well will help to prevent damage to your eyes. If you

are overweight, you should try to lose weight. Eat a healthy diet and learn how to control your blood sugar levels so that they stay within a healthy range.

- If you notice any changes in your vision, such as blurred eyesight or a sudden decline in vision, seek medical advice.



### Feet

- Patients with diabetes often develop foot ulcers and numb feet.
- It is important to examine your feet regularly. Look for any swollen areas, cuts or sores.
- Check inside shoes for seams or sharp objects that may cause blisters.
- Choose shoes which have a deep and rounded area around the toes so that they do not rub.
- Keep your toe nails healthy by cutting them once every 6-8 weeks.

- Wash your feet every day using soap and dry them carefully with a clean towel, especially between your toes. You should not soak your feet for a long time as this can cause them to dry out afterwards and risk more damage.
- You must always treat foot injuries as quickly as possible. If the foot becomes red, warm and swollen, there is usually an infection. You may need antibiotics to treat it.

# Cancer: a personal experience

Selina David (not her real name) is a patient with tongue cancer in Geita district, Tanzania. She is also HIV positive which makes her more vulnerable to diseases like cancer. She very kindly gave this interview to Mary Makalanga, a Palliative Care Coordinator who works in partnership with Tearfund.

## How did you find out that you had cancer?

Firstly I was diagnosed as being HIV positive. Some time later my tongue developed fungus and it was hard to eat. After a short period of time the tongue started to swell until it filled my mouth. I developed some lesions, like small abscesses, on my upper eye-lids and all over my face. Eventually I went to Ocean Road Cancer Institute in Tanzania where they told me I had cancer of the tongue. I received some medicine to reduce the swelling and returned back home to wait.

## What has been the biggest challenge of having cancer?

The biggest challenge I faced was severe pain and dependency, because I was unable to work due to the pain. I just lay down, day and night. I have three children who stay with my mother in another village. Before I was ill, I was the only one who was

working and providing the family with daily bread and other basic needs. When I was sick and useless, I couldn't do anything. I was just waiting to die. Things were also very difficult at my brother's house where I was staying. There was not enough food or other basics. My brother and his wife were also HIV positive, though still healthy. I found it discouraging. Because of my condition, I was in need of nutritional support and I was deteriorating. I knew in my heart that if nobody came to rescue me, I would die very soon.

## What support have you received? Who gave you this support? And how has this helped you?

One day a team of five home-based care volunteers from the African Inland Church of Tanzania came to me in the name of God. They talked to me and listened to my story. The team told me about a new service known as palliative



care and gave me some medical support, including drugs to reduce pain. They read the Bible and prayed with me. From then on the team continued to support me and my family with food and antiretroviral drugs [*medicine which helps to slow the progression of HIV/AIDS*]. Soon I got my peace of mind back and I felt more secure and comfortable than when I was in severe pain in the past. The swelling in my tongue slowly disappeared. My hope to survive has been restored again and I have good palliative care volunteers who visit me regularly, pray and talk with me. They care so much for me and I feel like a human being again.

## What is your advice to other people who are suffering from cancer?

My advice is to make sure you tell other people within your community about your condition as early as possible because then people can help and support you, particularly if you also have HIV. There are health workers and other volunteering groups who can help you to really understand what is going on. This is better than going to traditional or witch doctors, which can result in more pain, complications and new infections. With health workers you are safe because their medicine helps to reduce pain. With the support of skilled people from the palliative care group, a patient can become more psychologically, emotionally, spiritually and physically well. As for me, I now feel a lot less pain.



Peter Caton / Tearfund

Support from others is key to living well with disease.

# Freedom through mobility

by Lucy Norris

Benjamin Ramo is 60 years old and lives in Gilbert Camp, Malaita, in the Solomon Islands. Nine years ago Benjamin developed diabetes. After experiencing long-term complications with septicaemia (blood poisoning), he eventually lost his right lower leg when it became infected and had to be amputated.

Benjamin received a prosthesis (false leg) and, after receiving physiotherapy, was able to get around with the support of crutches. As time passed, Benjamin found that he needed a wheelchair to move around more easily indoors and to relieve pressure ulcers caused by the prosthesis.

Benjamin's situation is common in developing countries where even accessing a wheelchair can be a challenge. The World Report on Disability estimates that 15 per cent of the world's population live with some form of disability, therefore appropriate wheelchair provision is very important. The World Health Organization estimates that 10 per cent of the disabled population require a wheelchair; that amounts to 105 million people worldwide.

In response to this need, the World Health Organization (WHO) published *Guidelines on the provision of Manual Wheelchairs in less resourced settings* (See page 5 for more on the guidelines). These guidelines give important recommendations targeted at wheelchair services and others involved in wheelchair provision to 'promote personal mobility and enhance the quality of life of wheelchair users'.

As well as promoting better quality wheelchairs and improving the way users receive wheelchairs, the guidelines cover policy and planning at national level for creating sustainable wheelchair services.



Benjamin Ramo enjoys the freedom offered by his wheelchair.

## Appropriate, good quality wheelchairs

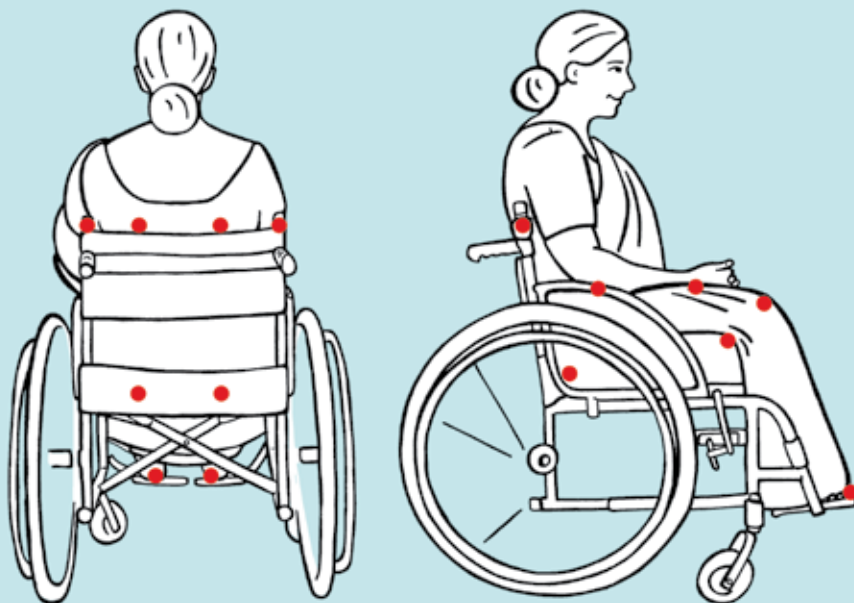
To meet the WHO Wheelchair Guidelines, wheelchairs must address individual needs. Firstly, the wheelchair must fit the user. If a wheelchair is too big, the user will not be able to wheel independently. If it is too small, it may cause stunted growth, scoliosis (bending of the spine) and pressure ulcers. A wheelchair without the right support can particularly affect children with cerebral palsy, making it hard for them to eat, drink or sit upright.

Secondly, it must also suit the user's environment. If the terrain is difficult, the wheelchair must be able to overcome obstacles and not tip over. To prevent life-threatening conditions like pressure ulcers, an appropriate cushion must be provided with the wheelchair.

## Wheelchair services

The best way to make sure that wheelchairs are right for the user is to set up a wheelchair service. The service can provide assessment, prescription and fitting of the right wheelchair. The wheelchair service can also provide a follow-up, maintenance and repair service for the user, as well as teaching users how to use ramps, get over obstacles and learn to navigate difficult terrain. These skills can really increase people's confidence, helping them

## Common pressure-sensitive areas



Illustrations courtesy of Motivation UK



to become more independent. Current wheelchair users are usually best placed to pass on such information to new users.

### What is a pressure ulcer?

A pressure ulcer starts as a red mark on the skin and can become a very serious deep wound that usually occurs in bony areas such as the hips, seat bones and ankles. Infected ulcers are one of the leading causes of death of people with disabilities in low-income countries. A pressure ulcer occurs when an area of skin becomes damaged, causing the tissue to die because of lack of blood flow to that area – this can be caused by pressure, friction, stretching, trauma or moisture. Pressure ulcers can take up to a year to heal, and if left untreated the ulcer will become infected and can lead to death. Yet, pressure ulcers are relatively easy and inexpensive to prevent. A simple pressure relief cushion can save a wheelchair user's life.

### Restored mobility

Wheelchairs can enable people to live mobile lives despite their disability, making them more likely to work and to participate in community life. Instead of being isolated and often dependent on carers, they can have greater freedom to participate in community life.

*Lucy Norris is Programme Development Support Officer at Motivation UK. Their mission is to enhance the quality of life of people with mobility disabilities around the world by addressing their survival, mobility, empowerment and inclusion.*

*Motivation has provided training in over 40 countries including Malawi, South Africa, Tanzania, Uganda, Sri Lanka and the Solomon Islands.*

Email: [info@motivation.org.uk](mailto:info@motivation.org.uk)  
Website: [www.motivation.org.uk](http://www.motivation.org.uk)

### Resources

- WHO Wheelchair Guidelines  
[www.who.int/disabilities/publications](http://www.who.int/disabilities/publications)
- World Health Organization (2011)  
*World Report on Disability* available on their website: [www.who.int](http://www.who.int)

### Planting bamboo

I am just writing to thank you for your information on how to plant bamboo.

I am 49 years old, since I was about seven years old I had this passion for bamboo. I have been planting it since then, and sometimes I just got lucky and it grew. Other times I spent a lot of time and it sprouted but a month later it died.

I did as you recommended and every single cutting sprouted. I planted them about a month and a half ago and some of them have reached up to three metres in height. Some others have not developed as fast but they look healthy.

Francisco J Call  
El Salvador  
Central America  
Email: [cisco.call@hotmail.com](mailto:cisco.call@hotmail.com)

**EDITOR'S NOTE:** *Growing bamboo was covered in Footsteps 23.*

### Dangers of tooth gouging

At Dentaïd, a UK-based oral health charity, we are seeking to increase awareness of the traditional African practice known in the West as Infant Oral Mutilation (IOM). A child's developing tooth buds are gouged out with unsterile nails or spokes in the mistaken belief that they are 'tooth worms' which will cause death unless removed. This is carried out as a 'cure' for fever, diarrhoea and vomiting, but can result in severe sepsis and/or death.

A comprehensive overview of the subject is available on [www.dentaïd.org](http://www.dentaïd.org) under

### Volunteers wanted!

Here at *Footsteps*, we love to hear from our readers. To help us to do this, we are looking for people to join our new 'Footsteps Feedback Group' so that you, the readers, can help us to make *Footsteps* even better! After each issue, we will send you a questionnaire to ask for your feedback. To apply to join, write to the Editor, briefly telling us about yourself and why you want to be part of this group.



Jean Abou, a *Footsteps* reader from Togo, sent us this photo of his son in their new door-sized garden. They were inspired by reading an article in *Footsteps* 54 and are now reaping a harvest for their family.

Resources. A colour A4 IOM information leaflet is downloadable in English, Lugandan and Kiswahili for distribution to charities and health workers in the field.

If you have experienced this practice, we would be interested to hear from you.

Rosemary Longhurst  
Email: [rosemary@dentaïd.org](mailto:rosemary@dentaïd.org)

Dentaïd  
Giles Lane  
Landford  
Salisbury  
SP5 2BG  
UK

### Poultry keeping

I would like to ask the Tearfund/*Footsteps* fraternity to assist me in learning about poultry keeping. I am very keen to start up poultry keeping, specifically chickens, as my additional income beside my employment. It is a project that I want to start in order to create employment for other people in the village. I would like to know about capital, structures and maintenance. I would greatly appreciate any assistance that others can give.

Agapetus Mathew Wamalwa  
Email: [agape82\\_wamalwa@yahoo.co.uk](mailto:agape82_wamalwa@yahoo.co.uk)

**EDITOR'S NOTE:** *You can read about poultry keeping in Footsteps 10.*

# Creative ways of communicating health messages

'Prevention is better than cure' is a well-known proverb. Non-communicable diseases often develop because people do not know basic health information which would help them to reduce their risk of disease. It is important to communicate health messages to people in ways that are engaging and which will help them to remember.

Storytelling is part of all cultures. It helps us to explain complex ideas in simple ways. There are many ways of telling stories: theatre, puppets, interactive games, music and even modern technology like video. Here are some ideas which you might want to try in your own community:

## Puppets

Putting on a puppet show can be an excellent way of communicating with people, especially those who live in rural areas. Sensitive topics can be explored in a puppet show in a way which may not be possible in a simple drama or health talk. Children are often keen to watch and will repeat the message to their families and explain it to younger siblings.

Involve the community in preparing the puppet show. They can help to develop the story, work the puppets and gather people for the performance. Pick a time and place where it will be easy for people to come and watch. For more see the box on page 15.

## Multimedia

Technology is opening new ways of communicating, particularly with young people. If you have access to a video camera, you could make a short film to communicate your health message. Or perhaps you can write and record a song. Good words to a catchy tune will be remembered long after people have heard your performance. Start by planning what information you want to give to your

audience, for example 'smoking kills one in three people who smoke' or 'eating a healthy diet helps protect you from heart disease'. Think creatively about how you could engage your audience, as well as how and where you can show the film or play the song to others.

## Theatre

Drama games and techniques such as Theatre for Development help to get people's attention. Many cultures are used to a more traditional style of teaching, but interactive teaching through games and drama can be fresh, new and attractive to them. You may develop a play and visit several communities to share your message. Or you may want to focus on one group of people and develop a performance in which they participate themselves.

Remember that developing a play will take time and investment from participants. You may want to keep the storyline simple to make sure your message is not lost. Think about well-known local stories and how you could adapt them in your performance.

## Visual art

Billboards, murals and posters can communicate with many people within your community, as well as those passing through. There may be a space outside a school or community centre which would be perfect for placing an attractive poster with a key health message. Local artists may be willing to design a poster or even paint a mural. You could involve children in designing a creative project. This will help them to remember the message themselves and leave a lasting and visible legacy for others. You could also create your own picture book, as mentioned in *Footsteps* 86.

## Inspired?

Could you use creative techniques to share information about non-communicable diseases with those in your community? Write to us to share your stories with other readers.

*Footsteps* has covered creative communication in previous issues. *Footsteps* 23 had a popular article on puppets and *Footsteps* 58 was dedicated to Theatre for Development.



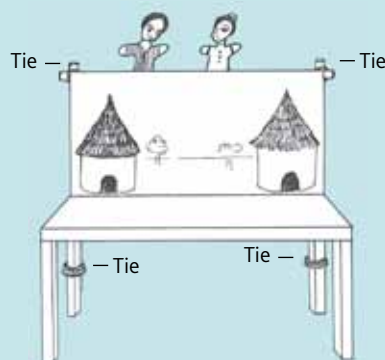
A drama workshop exploring stigma near Jinja, Uganda.

## Puppets for better health

**Puppets bring learning to life. Puppet shows are a form of action-packed story-telling by a group. Puppets can act out private situations or struggles between people without offending the audience – tackling issues such as domestic violence or sexual health.**

Puppets can go anywhere. We can put on a play in a classroom for 20 pupils in the daylight, or perform for 100 people in the village square by lamplight. Puppet shows are easier to organise than live drama because we need fewer people. The puppets and props are small and the production is easy to manage.

Tie two lengths of bamboo or sticks about the size of broom handles (2m long) to the legs of a table. Tie one across the top of the poles and pin on a backcloth.



Hang a cloth or blanket over a wooden stick across a doorway.



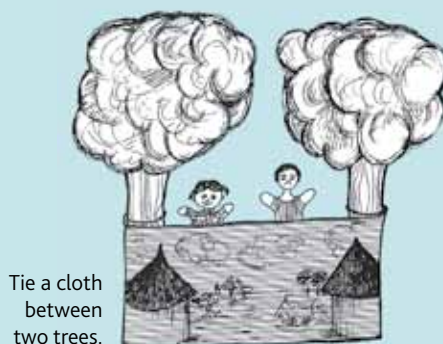
### Some hints for a good story

- Include music, songs and dancing
- Use local ways of telling stories and making drama. If local stories and drama are long and repeat themselves, try the same style with puppetry.
- Don't try to put too many ideas in one story. Give people one idea to think about. Words and actions should all add to this idea.
- Make the idea clear through what happens in the story. Don't preach at people.
- Action is as important as words. Puppets should do things, not just talk.
- Make speeches short, with no long pauses.
- Make plays a mixture of action, tears and laughter. Try for a balance between

serious or sad events and light or funny ones. 'Comic relief' is very important when a story is sad or frightening. Try using a comic character, perhaps an animal, or give the characters funny names.

Puppet shows attract lots of people, hold their attention and give them something to talk about afterwards. As shown here, there are many ways to build a puppet theatre, and you can improvise with what you have available.

*Gill Gordon wrote 'Puppets for Better Health' following her experiences working to improve child nutrition in West Africa in the 1970s and 80s. Her sister Sue Gordon joined her in leading puppetry workshops with local communities and later illustrated the book. The text and pictures are reproduced here with their kind approval.*



## Involve the audience

'Forum theatre' is an interactive way of exploring issues by examining a problem and suggesting a solution through role play. Actors or audience members can stop a performance and suggest how the actors can change the outcome of the scene. This helps the audience to participate in the action and think about how to solve the problem being presented. Below is an example about preventing lung disease:

- Briefly explain to the audience that you will be doing a play in which they will need to participate. This will engage them from the beginning of the process.
- Ask for a volunteer to enter the stage and ask him or her to mime cooking on an open fire inside the house.

- Ask for a second volunteer to come into the scene pretending to smoke.
- Ask for another volunteer to play a child coming back home. He or she should mime coughing as he or she breathes in smoke from the cigarette and the fire. A basic idea of a story has now been built, and the characters identified.
- Freeze the action and ask the audience what they see.
- Replay the action. This time the volunteers can speak – but they still need to keep the action brief.
- When the action has stopped, explain that we now have a short piece that we can discuss and develop. Tell the group that they should think about moments where

they could try to change the outcome for the child.

- Explain that we will now see the scene again, a bit faster, and that when someone sees a moment for change they should shout 'stop'. You will then freeze the action. A volunteer should replace one of the characters to try out a solution.

*With thanks to Martin Smedley, CEO of Act4Africa. Website: [www.act4Africa.org](http://www.act4Africa.org)  
Act4Africa is a health education charity which delivers HIV and AIDS education and behavioural change programmes to help prevent the spread of the disease. They have reached a million people with key health information using drama. Working with local partners, particularly churches, they train others to use theatre in their work.*



# First Aid: Heart attacks and strokes

## Heart attack

### What is a heart attack?

A heart attack is a serious medical emergency in which the supply of blood to the heart is suddenly blocked, usually by a blood clot. The lack of blood to the heart can seriously damage the heart muscles. If left untreated, the muscles will begin to die. The medical term for a heart attack is myocardial infarction.

Symptoms of a heart attack include:

- chest pain: the chest can feel like it is being pressed or squeezed by a heavy object, and the pain can spread from the chest to the jaw, neck, arms and back
- shortness of breath
- deep feeling of fear.

### What can you do?

- If there is a hospital or health clinic nearby it is very important to get the patient to medical attention as quickly as possible.
- If you have aspirin available, give the patient 300mg. Crush the tablet or let the patient chew it so that it works more quickly. Aspirin helps slow down the formation of a blood clot.
- If the patient survives the attack, they should rest. When they are strong enough, they should visit a doctor where possible. Gentle exercise is recommended. Walking a little more every day will help the patient to recover well.

## Stroke

### What is a stroke?

A stroke is a serious medical condition that occurs when the blood supply to part of the brain is cut off. Like all organs, the brain needs the oxygen and nutrients provided by blood to function properly. If the supply of blood is restricted or stopped, brain cells begin to die. This can lead to brain damage and sometimes death.

Symptoms of a stroke include:

- sudden numbness (losing feeling) or weakness of the face, arms, or legs
- sudden confusion or trouble speaking or understanding others
- sudden loss of vision in half the visual field
- sudden trouble walking, dizziness, or loss of balance or coordination
- sudden severe headache with no known cause.

### What can you do?

- If there is a hospital or health clinic nearby it is very important to get the

patient to medical attention as quickly as possible.

- If medical help is not available, put the person in bed with their head a little higher than their feet. Turn him or her onto their side, with the uppermost knee and hip bent up to support his or her body. This position will help saliva and mucus in the throat to drain out and breathing will become easier.
- Every three hours, turn the patient onto the other side.
- If the patient is unconscious, do not give him or her food, drink or medicine through the mouth.
- After the stroke, the patient might remain partly paralysed or unable to speak. Rehabilitation is very important. Encourage the patient to take exercise and to increase the distance he or she can walk each day if possible.

**In both cases, encourage the patient and let them know you are there to support them.**

## The recovery position

If a person is unconscious but is breathing and has no other life-threatening conditions, they should be placed in the recovery position. Putting someone in the recovery position will ensure the airway remains clear and open. It also ensures that any vomit or fluid will not cause them to choke.



To place someone in the recovery position:

- place the person on their side so they are supported by one leg and one arm
- open their airway by tilting the head back and lifting the chin
- monitor their breathing and pulse regularly
- if injuries allow, turn the person onto their other side after 30 minutes.

*Please note this position is not suitable for babies.*