

Checklist



Session time:
20 minutes

You will need

● Training card 4

● Visual card 4



● Summary sheet 4



USB

Session 4

Modifiable and non-modifiable risk factors

The aim of the session is to understand:

- ✓ What a risk factor is.
- ✓ What the risk factors for coronary heart disease are.
- ✓ What modifiable and non-modifiable risk factors are.
- ✓ Whether stress is a risk factor.

The information you need to get across is:

 10 minutes

What is a risk factor?

A risk factor is something that increases your chance of getting a disease.

The more risk factors for coronary heart disease that you have, the greater your chance of getting the disease.

What are the risk factors for coronary heart disease?

Some risk factors are called **modifiable**, because you can do something about them. There are other risk factors, called **non-modifiable**, which you can't change. However, many non-modifiable risk factors can be controlled and their effect reduced by making changes to your lifestyle.

What are the modifiable and non-modifiable risk factors?

Modifiable risk factors include:

- smoking
- high blood pressure
- diabetes
- physical inactivity
- being overweight
- high blood cholesterol.

The good news is that the effect of many risk factors can be changed (you cannot change the risk factor, only its effect). The effect of these modifiable risk factors can be reduced if you make lifestyle changes.

These modifiable risk factors are covered in more detail in *Topic 4: Preventing risk factors*:

- high blood pressure (in Session 7 on page 36)
- physical inactivity (in Session 8 on page 40)
- smoking (in Session 10 on page 48)
- diabetes (in Session 11 on page 53)
- high blood cholesterol (in Session 12b on page 62)
- being overweight (in Session 13 on page 71)

Non-modifiable risk factors are:

- age
- ethnic background
- family history of heart disease.

Age

The older you are, the more likely you are to develop coronary heart disease or to have a **cardiac event** (angina, heart attack or stroke).

Ethnic background

South Asians living in the UK are twice as likely to develop coronary heart disease compared to the rest of the UK population. Also, people from African Caribbean backgrounds have a higher than average risk of developing high blood pressure.

But remember that you can still reduce your risk as much as possible by controlling your other risk factors.

Family history

Your own risk of developing coronary heart disease is increased if:

- your father or brother was diagnosed with the disease, or had a cardiac event under the age of 55
- your mother or sister was diagnosed with the disease or had a cardiac event under 65.

If you have a family history of heart disease, it may help to reduce your own risk if you look at what the risk factors affecting your family member were. Ask yourself:

- Did they smoke?
- Were they overweight?
- Did they have a diet high in saturated fat?
- Were they physically inactive?
- Did they have diabetes?

If the answer is yes to one or more of these, then you can reduce your risk by making sure your lifestyle is not the same as theirs.

Some risk factors, such as being overweight, are sometimes related to lifestyle habits that are passed on from one generation to the next. However, it's also likely that **genes** are responsible for passing on the risk of developing coronary heart disease. Genes can also pass on other conditions, such as high blood pressure or high cholesterol levels. Both of these conditions increase the risk of getting coronary heart disease.

Is stress a risk factor for coronary heart disease?

Stress is not considered to be a direct risk factor for coronary heart disease, as we are not sure how it affects the development of the disease. However, the way that you deal with stress can encourage less healthy behaviour, such as smoking, drinking too much alcohol and overeating. These can all increase your risk of developing coronary heart disease.

Pre-session preparation

Print out *Summary sheet 4* [\[USB\]](#)

Activities

Key activity: Risk factors for coronary heart disease discussion
(whole group)



Right at the start of the session, before you cover the risk factors for coronary heart disease, ask the group for suggestions on what they think the risk factors are. Write them on a flipchart.

After you've covered the risk factors information, look at the group's suggestions on the flipchart and ask them which they think are correct. Then, using *Visual card 4* as your guide, draw a circle around the correct risk factors. **(5 minutes)**

Ask the group to divide the risk factors you have circled into two categories – 'modifiable' and 'non-modifiable'. It's useful to rewrite them on a new page of the flipchart under the two headings. **(5 minutes)**

At the end of the session

Hand out *Summary sheet 4* [\(USB\)](#)

Background information

Although you now have all the basic information you need to deliver Session 4, here's some more detail you might find useful.

Is there anything else which affects your risk?

People's income and the type of jobs they do, all appear to have an effect on how likely they are to get coronary heart disease. For example, people who work in manual jobs have a higher rate of coronary heart disease than people in other jobs, and people who live in poorer areas or are on lower incomes are also more likely to get the disease.

Recent studies have also shown that individuals that lack support in their working environment may also be more at risk of developing coronary heart disease. Recognising and dealing with stressful situations will help to prevent individuals using bad habits, such as smoking, drinking and eating more, to deal with stress.

Diabetes is classified as a modifiable risk factor. However, if you have diabetes, you cannot cure it. This means that anything that you can do to modify your lifestyle and keep your diabetes under control will help to reduce your risk of having a heart attack or developing angina. Having diabetes intensifies the effects of other risk factors that you may have, so it is important to reduce the risk of developing it.

While a family history of coronary heart disease is non-modifiable, ie, if you have a family history of coronary heart disease, you cannot change it, making changes to your lifestyle will significantly reduce the risk of you developing coronary heart disease prematurely.

For more information

bhf.org.uk

BHF Heart Helpline: 0300 330 3311 – for information and support on anything related to heart health.

This service is available in English only.

BHF DVDs:

Risking it (English soundtrack and subtitles)

Living to prevent heart disease (aimed at South Asians, with soundtracks in English and five South Asian languages)

BHF booklets:

Looking after your heart (aimed at South Asians, in English and five South Asian languages)

Keep your heart healthy (in English, Polish and Welsh)

To order these free resources, call the **BHF Orderline** on **0870 600 6566**.

Session 5

Introduction to screening

The aim of the session is to understand:

- ✓ Screening for coronary heart disease.
- ✓ Self-assessment for coronary heart disease.
- ✓ Screening by health professionals.

The information you need to get across is:



What is screening for coronary heart disease?

Screening means to examine or check a person for a disease or diseases. For coronary heart disease, the measurements that you can check that affect your risk are:

- waist measurement
- weight
- blood pressure
- blood cholesterol level
- blood sugar level.

What is self-assessment?

The following measurements can be checked by a health professional or by yourself:

- waist
- weight
- Body Mass Index (BMI) (See Session 13 on page 71.)

Your body shape

Everyone who carries too much weight around their middle has a greater risk of developing coronary heart disease, high blood pressure and diabetes. One way of finding out if your body shape is increasing your risk is by measuring your waist.

People of South Asian background are more likely to have a higher proportion of body fat to muscle than the rest of the UK population. They also tend to carry this fat around their middle. So South Asians have a greater risk of developing problems such as coronary heart disease at a lower waist size than other people in the UK.

Body Mass Index (BMI)

Body mass index measurement (BMI) is one that relates your weight to your height. BMI is usually expressed as a range, such as ideal weight, overweight or very overweight. BMI, however, should not be used in isolation to determine if someone is a healthy weight. It is important to look at body shape too.

BMI and South Asians

For South Asians, BMI may not be a reliable measurement to help assess their coronary heart disease risk as they are at higher risk at a lower BMI. This is because South Asians have a tendency to carry larger amounts of body fat around their middles (increasing the risk of high blood pressure and diabetes), and because body fat weighs less than muscle. So, for example, a South Asian may have the same BMI as a European, but their risk of developing coronary heart disease could be greater because their BMI is made up of more body fat than muscle³.

Checklist



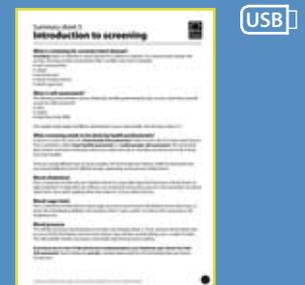
Session time:
30 minutes

You will need

- Training card 5
- Visual card 5



- Summary sheet 5



- Case study 5 



What screening needs to be done by health professionals?

Everyone over the age of 40 should see their GP for a free **cardiovascular risk assessment** to find out their risk of getting coronary heart disease, having a heart attack or having a stroke.

This is sometimes called a **heart health assessment** or a **heart health risk assessment**. The assessment gives your GP information about your future risk and what they can advise you to do to keep your heart healthy. There are several different tests to assess people's risk of coronary heart disease. Health professionals may recommend different tests for different people, depending on the person's family history:

Blood cholesterol

This is a blood test to find out your cholesterol level. It is especially important if you have a family history of high cholesterol. If you're having a risk assessment, it is likely that you will have your cholesterol measured as part of the assessment. You may be asked not to eat or drink anything other than water for 12 hours before having your blood test. (Please see the background information section for more information on cholesterol.)

Blood sugar level

This is a blood test to find out how much sugar you have in your blood. It will tell your doctor if you have, or are at risk of developing, diabetes (see Session 11 on page 53). It is done at the same time as the cholesterol test.

Blood pressure

This will tell you if your blood pressure is too high (see Session 7 on page 36). If it is, and your doctor thinks that you are at risk of developing coronary heart disease, they will arrange for you to have several readings taken over a couple of weeks. This will establish whether you have a consistently high blood pressure reading.

You can have your blood pressure and cholesterol measured by various people, eg, by the practice nurse at your local GP surgery or by some pharmacists. Although many people, such as pharmacists, are trained to carry out these tests, they do not know your full medical history, and therefore the results may not be entirely accurate.

If you have one or more of the risk factors mentioned above, you should see your doctor for a full risk assessment. Home testing kits are not a suitable replacement for the information that your doctor can give you.

Pre-session preparation

Print out *Summary sheet 5* and *Case study 5* 

Activities

Key activity: Case study – risk factors for coronary heart disease
(small groups/pairs)

 20 minutes

Case study 5

Name: Vinda Kaur

Age: 65

Gender: Female

Ethnicity: South Asian

Waist measurement: 90cms (about 35.5 inches)

Vinda Kaur is 65 years old, and lives with her husband, son and daughter-in-law. She is overweight, with a waist measurement in the 'health is at high risk' category, and knows that she should try to lose some weight.

She wants to change her diet, so that she eats more healthily and loses weight, but she doesn't want to offend her daughter-in-law by commenting on her cooking. When Vinda Kaur visits her GP surgery they tell her she needs to lose weight and change her diet, but because of her weight, she finds exercising difficult. The whole family love their food, and regularly eat snacks of lamb koftas and vegetable pakora.



Hand out the case study to each small group/pair.

Ask them to answer the following questions on the case study: **(10 minutes)**

1. What are Vinda Kaur's risk factors for coronary heart disease?

Vinda Kaur's known risk factors are:

- physical inactivity
- being overweight (waist measurement is in the 'health is at high risk' category)
- ethnic background.

Vinda Kaur may have unknown risk factors including:

- family history of heart disease
- smoking
- high blood pressure
- high cholesterol
- diabetes.

2. Which of her known risk factors are modifiable, and which are non-modifiable?

Vinda Kaur's modifiable risk factors are:

- physical inactivity
- being overweight.

Her non-modifiable risk factors are:

- ethnic background.

3. What screening should she have to assess her risk of coronary heart disease?

Vinda Kaur has several risk factors that mean she is at increased risk of developing diabetes and coronary heart disease. These include:

- being physically inactive
- having a waist measurement over 80cms
- being overweight.

Although she can measure these herself and she can have her blood pressure and cholesterol checked at a pharmacy, she should be advised to see her doctor or nurse for a full cardiovascular risk assessment.

4. Ask them to make suggestions about where Vinda Kaur could be screened?

Vinda Kaur can record the following things about herself:

- weight
- level of physical activity
- waist measurement.

A health professional will need to assess the following, which could be done at a pharmacy or GP surgery:

- blood pressure
- blood cholesterol level
- blood sugar level.

Ask each group to nominate a spokesperson and take it in turns for each group to feed back.

Ask them to write their answers on a flipchart. **(10 minutes)**

At the end of the session

Hand out *Summary sheet 5* 

Background information

Although you now have the basic information you need to deliver Session 5, here's some more detail you might find useful.

Blood cholesterol

Cholesterol is a fatty substance found in the blood, mostly derived from the saturated fat in the food you eat. Although it plays a vital role in helping your body cells to work, too much cholesterol can increase your risk of coronary heart disease. There are two types of cholesterol:

- **LDL** is a 'bad' type of cholesterol
- **HDL** is a 'good' type of cholesterol which removes LDL from the bloodstream.

Triglycerides are another type of fatty substance in the blood. They are found in foods such as dairy products, meat and cooking oils. If you are very overweight, eat a lot of fatty foods or drink too much alcohol, you are more likely to have a high level of triglycerides. Total cholesterol, low-density lipoprotein (LDL), high-density lipoprotein (HDL) and triglyceride levels are all measured using a blood test. They are measured in units called millimols per litre of blood or 'mmol/l'.

Familial hypercholesterolaemia

About 1 in 500 people in the UK have inherited high blood cholesterol due to a condition called **familial hypercholesterolaemia** or **FH**. In people with FH, the way LDL cholesterol is removed from the blood circulation does not work as effectively as normal and their cholesterol levels may be abnormally high. So an adult with FH may have a cholesterol level of between 8 and 12 mmol/l, and sometimes much higher. Children and young women may have lower levels, but the level is usually above 6.7 mmol/l in children.

For more information on LDL, HDL and triglycerides please see Session 12b on page 62. For more information on blood pressure readings please see Session 7 on page 36.

Primary and secondary prevention

If someone has already been diagnosed with coronary heart disease, diabetes or they have had a cardiac event (angina or a heart attack), their care is governed by treatment guidelines that deal with **secondary prevention** of heart disease, ie, trying to stop the patient's condition getting worse, or helping to reduce their chances of having a heart attack. If someone asks for information or advice on secondary prevention you should ask them to contact their GP or the BHF Heart Helpline. For individuals that have not had a cardiac event, or have not been diagnosed with coronary heart disease their treatment guidelines come under **primary prevention**.

Everyone is different. Two people with the same condition may need different treatment and specialist advice from a qualified healthcare professional.

For more information

bhf.org.uk

BHF Heart Helpline: 0300 330 3311 – for information and support on anything related to heart health.

This service is available in English only.

BHF booklets:

Keep your heart healthy (in English, Polish and Welsh)

Familial hypercholesterolaemia (in English)

To order these free resources, call the **BHF Orderline** on **0870 600 6566**.

Session 6

Making changes

The aim of the session is to understand:

- ✓ What you can change to improve your heart health.
- ✓ How to make successful changes and who can help.
- ✓ What can help.
- ✓ Top tips.

The information you need to get across is:

 10 minutes

What can you change to improve your heart health?

Many research studies have suggested that a person's lifestyle can be a cause of ill health. So it's a good idea to think about changing lifestyle factors which you can control – the modifiable risk factors for coronary heart disease discussed in Session 4. These are:

- smoking
- high blood pressure
- high blood cholesterol
- physical inactivity
- being overweight
- diabetes.

How can you make successful changes and who can help?

Experience and research tell us that to increase the chances of successfully making a change⁴:

- **You need to want to make the change.** If the person doesn't want to change their lifestyle, no-one can make them do so.
- **There needs to be a lifestyle change.** For example, a person trying to eat more healthily needs to clear out their fridge and cupboards of foods that are high in fat, salt and sugar, and re-stock them with healthy foods.
- **The lifestyle change must continue over time.** The change needs to become part of everyday life. For example, a person trying to get more active by walking to work needs to continue doing so every day.
- **The lifestyle being changed cannot be a way of coping.** For example, if someone smokes when they are stressed, they need to replace this habit with another coping mechanism, such as chewing sugar-free gum. Otherwise, when they get stressed, they will reach for their cigarettes.
- **Their life should not be uncertain when making the change.** For example, if someone is having a challenging time – such as changing their job or moving house – it is probably not the best time to make a lifestyle change.
- **The person needs social support.** This can be from friends, family and/or health professionals. The person needs to identify who they will get support from and let those people know about the change they plan to make, so that they know how to provide support.

Checklist



Session time:
45 minutes

You will need

- Training card 6
- Visual card 6

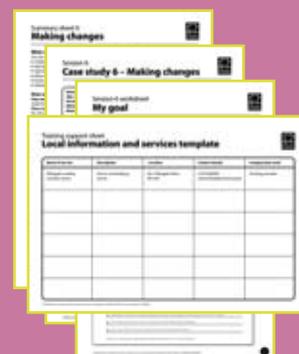


- Summary sheet 6 

- Case study 6 

- My goal worksheet 

- Local information and services template 



Making changes to your lifestyle can be challenging at first, but over time you will notice the benefit to your health and wellbeing. You can get help from health professionals, such as:

- dietitians
- physical activity instructors
- smoking cessation advisers
- health advocates
- the BHF Heart Helpline.

What can help?

Don't be discouraged if you feel you can only manage one small change at a time. Set yourself a goal and make a plan to help you achieve it. For example, if your goal is to increase the amount of physical activity you do, you could plan to go swimming three times a week. But if your time is limited, you could start by going once a week and aim to work up to two, then three days over time. If you keep your goals **specific**, **realistic** and **manageable**, you'll find them easier to achieve.

Helpful definitions

Specific: Make your goal straightforward and write down what you want to achieve. Don't worry if you have to break a large goal into smaller ones to achieve it.

Measurable: An example of a measurable goal is saying "I want to go swimming twice a week for 30 minutes". An example of a goal that isn't measurable is saying "I want to go swimming more".

Realistic: This doesn't mean making your goal too easy, it means not setting yourself a goal that's too difficult to fit it into your daily life. If you aim too high you are setting yourself up for failure. If you get the balance right you will have a real sense of achievement when you reach your goal.

Are there any tips to help you achieve your goal?

1. Commit to your goal, plan, get enough support, and consider what potential difficulties you may face and the rewards you might give yourself. For example, buy yourself a treat with the money you save by not using the car for very short journeys. Write it all down. Review your goal regularly and consider how you are doing.
2. Tell as many people as you can what you are doing so they can support you – and it makes it harder for you not to stick to your plan!
3. When you have achieved your goal, think about setting a new one.
4. If you're not achieving your goal, or if you have tried to make changes but have so far been unsuccessful, **don't give up**. You may need to review your plan or get further advice and support. It may be that your goal was unrealistic. Discuss this with a health professional, for example, your practice nurse or GP, or call the BHF Heart Helpline.
5. Remember to review all of your modifiable risk factors regularly, as you may feel ready to make changes to another modifiable risk factor at a later date.

Pre-session preparation

1. Investigate local information and support services. Print out the *Local information and services template* and fill it in 
2. Print out *Summary sheet 6*, *Case study 6* and *My goal worksheet* 

Activities

Key activity: Shared experience – making lifestyle changes
(small groups/pairs)

 15 minutes

Ask each group/pair to share any experience they have of trying to make a lifestyle change. **(10 minutes)**

- What worked and what didn't?
- Were they able to maintain the changes?

Ask participants to list three things they'd like to change, then discuss:

1. Which one is the most important right now?

- Reinforce the point about addressing one lifestyle change at a time.
- Remind them that when they're making one lifestyle change, it may benefit other aspects of their lifestyle, eg, by increasing their physical activity they might also lose weight.

2. Which one is the most realistic?

- Remind the group that goals which are specific, realistic and manageable are easier to achieve than goals which are too vague or ambitious.

Hand out the *My goal worksheet* to each small group/pair, and invite participants to make their own plan about how they can increase their physical activity, or make a lifestyle change. Remind them to make their goals specific, realistic and manageable. **(5 minutes)**

Key activity: Case study – making lifestyle changes (small groups/pairs)

 20 minutes

Case study 6

Name: Stephen

Age: 68

Gender: Male

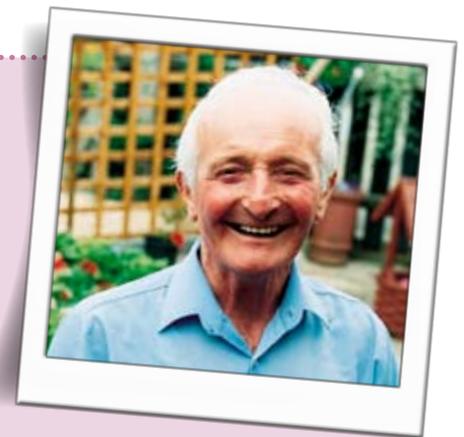
Ethnicity: White British

Waist measurement: 99 cm (about 39 inches)

Stephen tries to exercise regularly by going for a 10 minute leisurely walk with his dog at least three times a week and whenever else he finds the time. Occasionally, he also walks when he is meeting friends or going to the shops. He knows this is good for him although he finds it easier to drive.

He smokes approximately 15 cigarettes a day (low tar). He doesn't enjoy smoking as much as he used to, has been thinking of giving up and has asked his GP for some advice.

Stephen's waist measurement puts him in the 'health is at risk' category.



Hand out the case study to each small group/pair.

Ask the group to focus on and write down how they could help and support Stephen to increase the amount of physical activity he does, and/or stop smoking.

Ask them to answer the following questions on the case study: **(10 minutes)**

1. What are Stephen's risk factors for coronary heart disease?

Stephen's known risk factors are:

- not achieving the recommended level of physical activity (See Session 8 on page 40.)
- being overweight (waist measurement indicates he is in the 'health is at risk' category)
- smoking.

Stephen may have unknown risk factors including:

- family history of heart disease
- high blood pressure
- high blood cholesterol
- diabetes.

2. Which of his known risk factors are modifiable, ie, which can he change?

Stephen's modifiable risk factors are:

- physical inactivity
- being overweight
- smoking.

Ask them to discuss:

3. Whether they think Stephen is ready to make a lifestyle change?

- Stephen tries to exercise regularly and has sought help about giving up smoking, so he is likely to be ready to start making a lifestyle change.

4. What are the potential barriers to Stephen becoming more physically active, and/or stopping smoking, and how could he overcome them?

Stephen's potential barriers are:

- being overweight
- lack of motivation
- preferring to take the car instead of walking (although the petrol money saved could buy a reward)
- addiction/dependence on cigarettes.

His potential solutions could be:

- setting himself achievable goals and rewarding himself when he reaches them
- taking the dog for more energetic walks, which would increase Stephen's activity level, and may help him stop smoking by boosting his sense of wellbeing
- investigating local walking groups etc
- following a healthy diet
- investigating what local or national stop smoking services are available for information and support
- after quitting, he could buy himself a reward with the money he saves on cigarettes.

5. Ask them to make suggestions about where he could go for advice and support.

- See his GP or practice nurse, health advocate or trainer, call a stop smoking helpline or the BHF Heart Helpline.

Ask each group to nominate a spokesperson and take it in turns for each group to feed back. Ask them to write their suggestions on a flipchart. **(10 minutes)**

At the end of the session

Hand out *Summary sheet 6* and the completed *Local information and services template* [\[USB\]](#)

Background information

Although you now have all the basic information you need to deliver Session 6, here's some more detail which you might find useful.

How do people make changes?

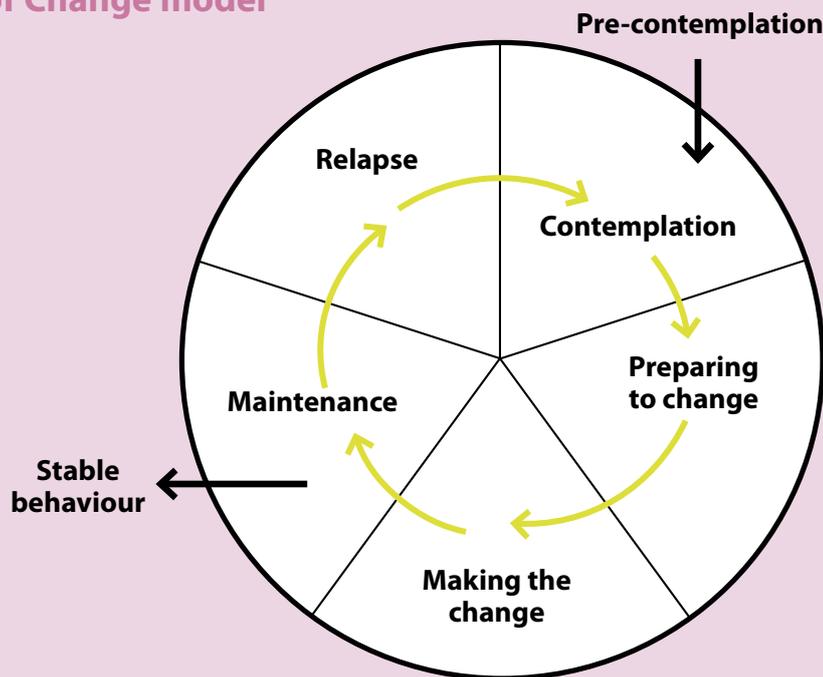
There are a several theories which aim to explain how people make changes to their lifestyle. One of these is called the **Stages of Change model**⁵.

According to the model, no change is final but is part of an ongoing cycle of change which includes the following stages:

- **Pre-contemplation.** This is when people are not thinking about changing their lifestyle and are not aware of the risk to their health.
- **Contemplation.** This is when people are aware of the risk, but are not ready to make the change. They might be seeking more information or help to make that decision.
- **Preparing to change.** This is when the benefits of making the change are greater than the costs of not making the change. People might look for extra support during this time.
- **Making the change.** This is when people are taking positive action to do things differently by setting a goal, making a realistic plan, and getting support and rewards.
- **Maintenance.** This is when the new lifestyle is sustained and the person has a healthier lifestyle.
- **Relapse.** This is when a person goes back to their old, unhealthy lifestyle – but the good news is that they might try to change it again.

People can go backwards or forwards through the series of cycles of change.

Stages of Change model



Source: adapted from Prochaska and DiClemente

For more information

bhf.org.uk

BHF Heart Helpline: 0300 330 3311 – for information and support on anything related to heart health.

This service is available in English only.

Heart Matters – a FREE BHF service offering information and support on improving your heart health.

Visit **bhf.org.uk/heartmatters**