

**NHS
HEALTH
CHECK**

Helping you prevent
diabetes
heart disease
kidney disease
stroke & dementia



NHS Health Check Training for Healthy Living Centre Staff and Colleagues .

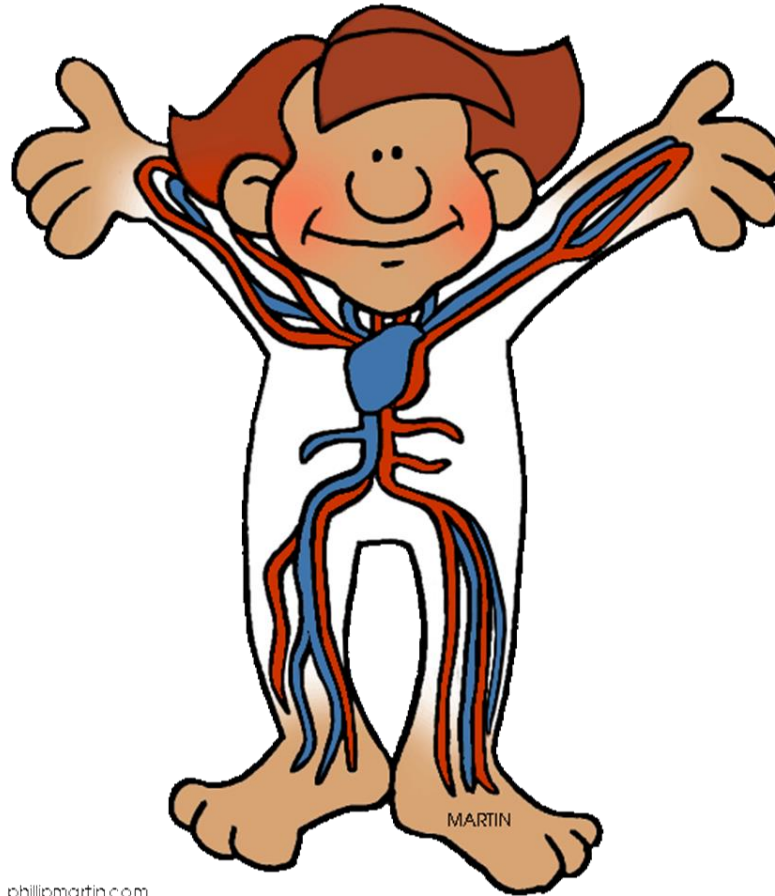
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Aim of the session

1. Understanding of the cardiovascular system
2. Describe the most common types of cardiovascular disease (CVD) and the causes
3. Understand which lifestyle risks increase the prevalence of CVD (and other diseases)
4. Highlight the top 7 causes of cardiovascular (and other) disease (that are modifiable)
5. Components of an NHS Health Check

The cardiovascular system (simplified)



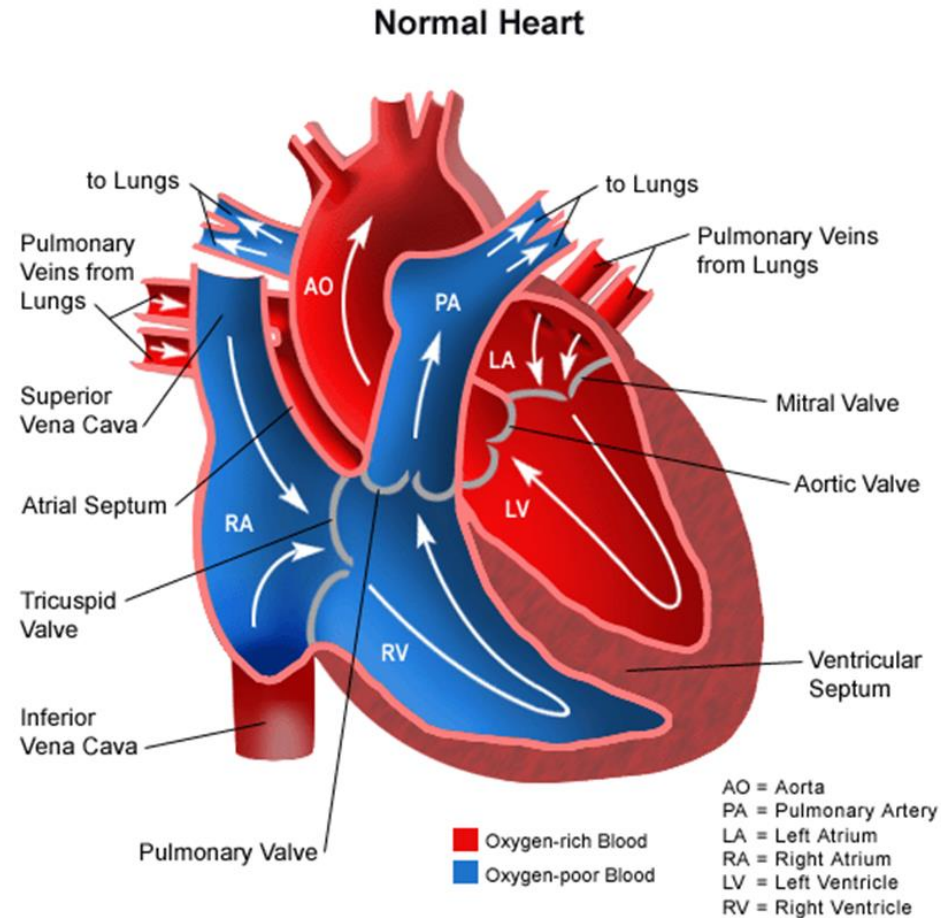
What are the components of the cardiovascular system?

The cardiovascular system consists of :

- 1. The heart,**
- 2. Blood vessels,**
- 3. Blood.**

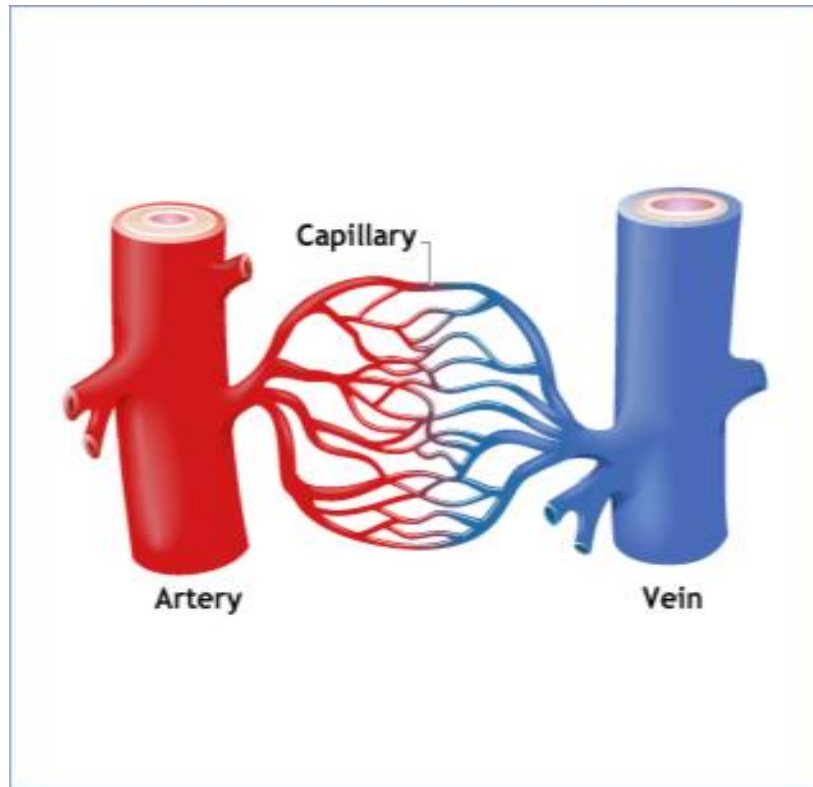
What is the cardiovascular system?

1. Heart



What is the cardiovascular system?

2. Blood Vessels



What is the cardiovascular system?

3. Blood



The cardiovascular system and its function

This system has three main functions:

- 1.** Transport of nutrients, oxygen, and hormones to cells throughout the body
- 2.** Removal of metabolic wastes (carbon dioxide, nitrogenous wastes).
- 3.** Protection of the body by white blood cells, antibodies, and complement proteins that circulate in the blood and defend the body against foreign microbes and toxins. Clotting mechanisms are also present that protect the body from blood loss after injuries.

The most common forms of Cardiovascular Disease and the causes

Cardiovascular disease (CVD) is a general term that describes a disease of the heart or blood vessels.

There are four main types of CVD. They are:

1. Coronary heart disease
2. Stroke
3. Peripheral arterial disease
4. Aortic disease

The common risk factors including lifestyle factors (95% are modifiable) which determine the risk of cardiovascular disease

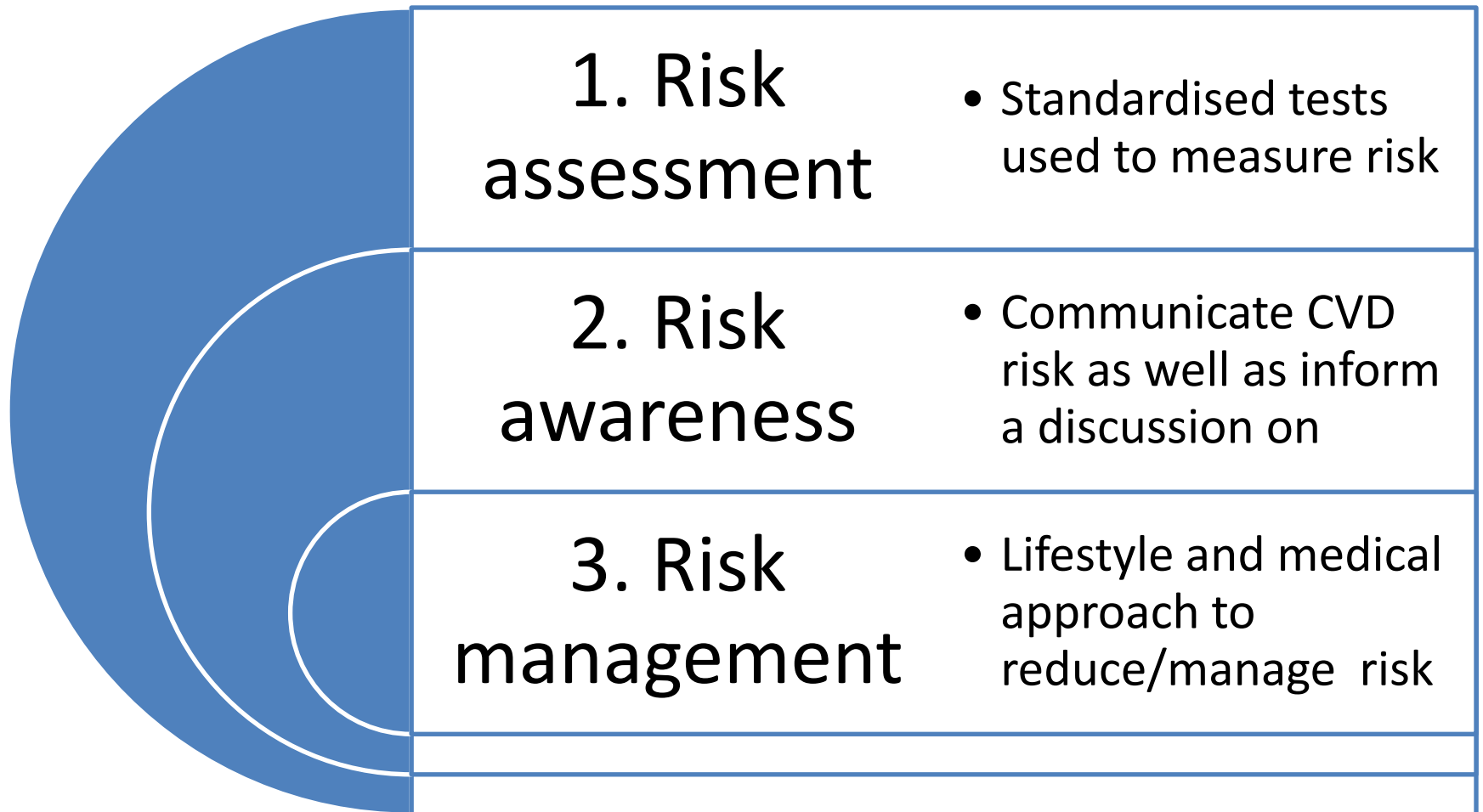
The top 7 causes of preventable deaths:

1. High blood pressure
2. Smoking
3. High Cholesterol
4. Obesity
5. Poor diet
6. Physical inactivity
7. Alcohol consumption.

“The early identification and management of these risks could substantially reduce morbidity, mortality and health inequalities that result from the diseases they cause”.

Public Health England May 2015

The 3 key components of an NHS Health Check





Elements of the NHS Health Check



Elements of an NHS Health Check

Risk Assessment			Risk Awareness	Risk Management
Personal details	Clinical Measurements	Lifestyle Assessment		Prevention /management advice
Ethnicity	Pulse	Diet	Communication of results (including Qrisk)	Goal setting
Family history	Blood Pressure (BP)	Alcohol intake (Audit C)		Referral and signposting
	BMI	Smoking status		
	Cholesterol	Exercise (GPAQQ)		

Risk Assessment

Likelihood

	Low	Medium	High
High	Yellow	Red	Red
Medium	Green	Yellow	Red
Low	Green	Green	Yellow

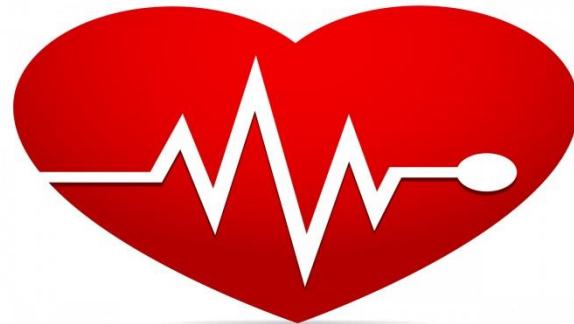
Impact

Clinical Measurements



What is a pulse/heart rate ?

Your pulse is the rate at which your heart beats. Your pulse is usually called your heart rate, which is the number of times your heart beats each minute (bpm). But the rhythm and strength of the heartbeat can also be noted, as well as whether the blood vessel feels hard or soft.

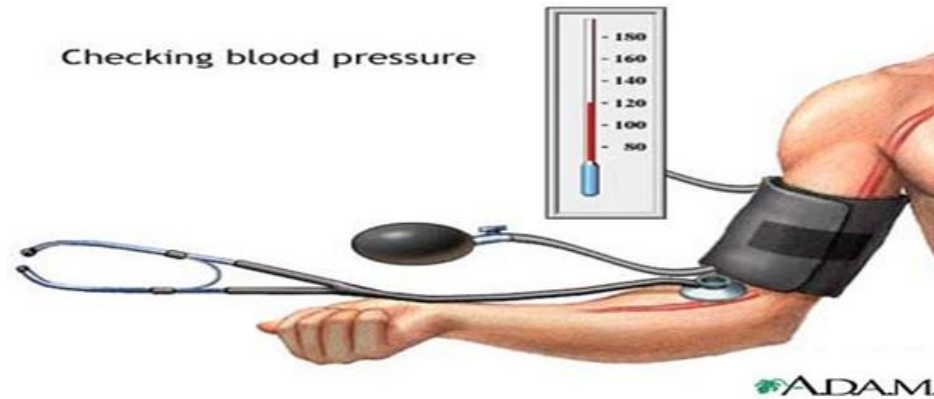


Finding your pulse

- You can find your pulse in places where an artery passes close to your skin, such as your wrist or neck.
- **To find your pulse in your wrist:**
- hold out one of your hands, with your palm facing upwards and your elbow slightly bent
- put the first finger (index) and middle finger of your other hand on the inside of your wrist, at the base of your thumb
- press your skin lightly until you can feel your pulse – if you can't feel anything, you may need to press a little harder or move your fingers around

What is blood pressure?

When your heart beats, it pumps blood round your body to give it the energy and oxygen it needs. As the blood moves, it pushes against the sides of the blood vessels.



The strength of this pushing is your blood pressure. If your blood pressure is too high, it puts extra strain on your arteries (and your heart) and this may lead to heart attacks and strokes.

What is blood pressure?

What do the numbers mean?

- Every blood pressure reading consists of two numbers or levels. They are shown as one number on top of the other.
- The first (or top) number is your systolic blood pressure. It is the highest level your blood pressure reaches when your heart beats.
- The second (or bottom) number is your diastolic blood pressure. It is the lowest level your blood pressure reaches as your heart relaxes between beats.

How to lower your blood

Eat well, be active, have a health



- An unhealthy lifestyle will raise your blood pressure over time. And the higher your blood pressure becomes, the higher your risk of having a stroke or heart attack in the future.
- But the good news is that if you have high blood pressure, healthy changes will help to bring it down. And you don't have to wait until you have high blood pressure to make healthy lifestyle changes. The more you can reduce your blood pressure, the lower your risk of a heart attack or stroke will be.

Body Mass Index (BMI)

BMI is a measure that adults can use to see if they are a healthy weight for their height.

What is a healthy BMI?

- For most adults, an ideal BMI is in the 18.5-24.9 range.
- If your BMI is 25 or more, you weigh more than is ideal for your height:
 - 25-29.9 is overweight
 - 30-39.9 is obese
 - 40 or more is very obese
- If your BMI is less than 18.5, you weigh less than is ideal for your height.
- The BMI threshold for some Black Asian Minority (BAME) Groups varies (see pathway)

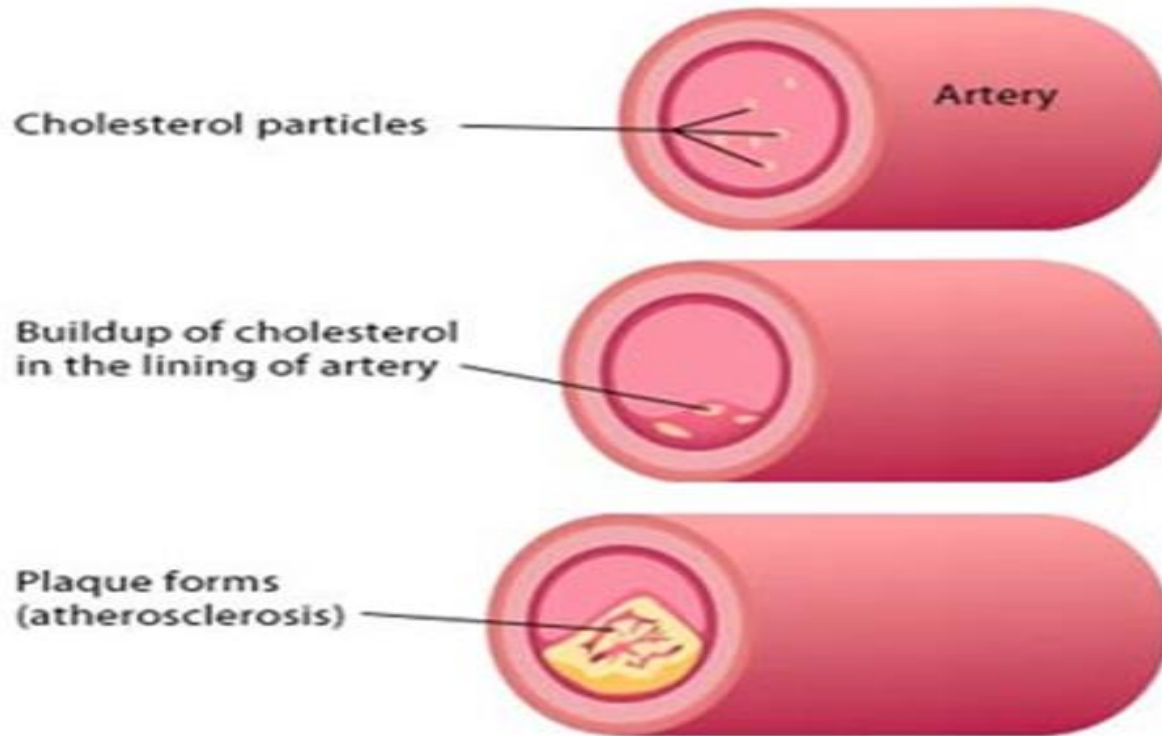
What is cholesterol ?

- To understand high blood cholesterol (ko-LES-ter-ol), it helps to learn about cholesterol. Cholesterol is a waxy, fat-like substance that's found in all cells of the body.
- Your body needs some cholesterol to make hormones, vitamin D, and substances that help you digest foods. Your body makes all the cholesterol it needs. However, cholesterol also is found in some of the foods you eat.
- Cholesterol travels through your bloodstream in small packages called lipoproteins (lip-o-PRO-teens). These packages are made of fat (lipid) on the inside and proteins on the outside.

What is cholesterol ?

- **Two kinds** of lipoproteins carry cholesterol throughout your body: low-density lipoproteins (LDL) and high-density lipoproteins (HDL). Having healthy levels of both types of lipoproteins is important.
- **LDL** cholesterol sometimes is called “bad” cholesterol. A high LDL level leads to a build-up of cholesterol in your arteries. (Arteries are blood vessels that carry blood from your heart to your body.)
- **HDL** cholesterol sometimes is called “good” cholesterol. This is because it carries cholesterol from other parts of your body back to your liver. Your liver removes the cholesterol from your body.

Cholesterol build up and plaque formation



What is high blood cholesterol?

- High blood cholesterol is a condition in which you have too much cholesterol in your blood. By itself, the condition usually has no signs or symptoms. Thus, many people don't know that their cholesterol levels are too high.
- People who have high blood cholesterol have a greater chance of getting coronary heart disease, also called coronary artery disease. (In this article, the term "heart disease" refers to coronary heart disease.)
- The higher the level of **LDL** cholesterol in your blood, the **GREATER** your chance is of getting heart disease. The higher the level of **HDL** cholesterol in your blood, the **LOWER** your chance is of getting heart disease.
- Coronary heart disease is a condition in which plaque (plak) builds up inside the coronary (heart) arteries. Plaque is made up of cholesterol, fat, calcium, and other substances found in the blood. When plaque builds up in the arteries, the condition is called atherosclerosis (ATH-er-o-skler-O-sis).

Lifestyle Assessment



Food and Diet



What is Audit C?

- The Audit C is an alcohol screen that can help identify people that are hazardous drinkers or have active alcohol use (including alcohol abuse and dependence)



What is GPAQ? General Practice Physical Activity Questionnaire

- The Global Physical Activity Questionnaire was developed by WHO for physical activity surveillance in countries. It collects information on physical activity participation in three settings (or domains) and sedentary behaviour.

These domains are:

1. Activity at work
2. Travel to and from places
3. Recreational activities



What is Qrisk 2 ?

- Qrisk 2 is a tool that enables you to work out a persons risk of heart attack , or stroke over the next 10 years

<http://www.qrisk.org/>

- The Heart Age Tool , can be useful to share with clients as they can remove or reduce current lifestyle risks (such as smoking etc) , to see how their heart age can be improved

<https://www.nhs.uk/conditions/nhs-health-check/pages/check-your-heart-age-tool.aspx>

Dementia Information giving 65-74 year olds only

- Understand the link between dementia and cardiovascular disease
- Take action to reduce the risk of developing dementia
- Learn about services available for information and support