



Royal Berkshire  
NHS Foundation Trust

# Cardiac Rehabilitation:

## Patient exercise & care record

Name:	
Cardiac Rehab Nurses:	
Cardiac Rehab Exercise Instructor:	

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This twice a week Cardiac Rehabilitation programme runs for six weeks and aims to promote awareness of your exercise requirements. It is also designed to encourage you to change and adapt your lifestyle as a way of managing your heart condition or following heart surgery.

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Class times:	
Start date:	
Finish date:	

### If you are unable to attend a class

Please let us know if you are unable to attend any of your exercise sessions. Telephone: 0118 322 6638

### What to bring with you

- This booklet.
- Your GTN spray/tablets (if you have been prescribed this).
- A cereal bar or banana (if your diabetic – please also advise the nurse of your latest blood glucose readings).
- Your inhaler (if you're asthmatic).
- A bottle of water.
- A small towel (optional).

## Please let us know if:

- You have forgotten to take your medication.
- You have had your medication changed.
- You have been feeling unwell.

## What to wear:

- Soft soled shoes or trainers.
- Sweatshirt or jumper with t-shirt or shirt underneath.
- Tracksuit trousers, jogging bottoms or shorts.

**Do not wear sandals or slip on shoes.**

**Do not wear denim or corduroy.**

## What happens in each session

- Check in (blood pressure and heart rate check).
- Warm up (15 minutes in total).
- Main exercise session (20 minutes in total).
- Mid-session (heart rate check).
- Cool down (10 minutes in total).
- Check out (heart rate check).

## Education sessions

There is also two education evenings, providing an opportunity for the group to ask questions and discuss topics such as:

The heart.

Risk factors.

Medication.

Exercise.

Stress, anxiety and depression.

Diet.

## Checking in

You should aim to keep your blood pressure below 130/80. We will take your blood pressure and heart rate at the start of each class. If there is any concern your blood pressure is too high, we will discuss this and advise of any follow up required.

Please record your blood pressures and heart rate here:

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
1						
2						

### **Notes:**

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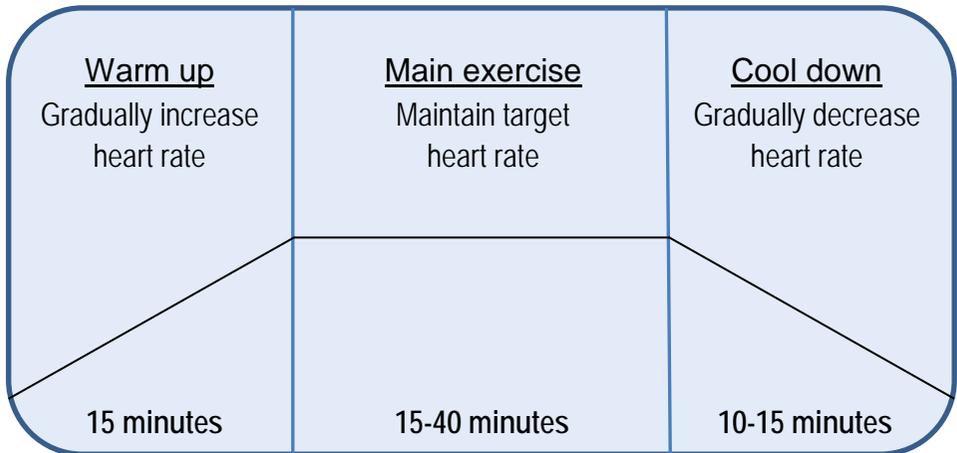
<b>Target exercise heart rate range:</b>	
Level Red	Date:
Level Orange	Date:
Level Green	Date:

## Points to remember when exercising:

- Wait at least two hours after a meal.
- Wrap up warmly on cold days.
- Drink plenty of fluids on hot days.
- Carry your GTN spray with you (if prescribed).

## Warming up and cooling down

You should always think of any activity you are doing as part of a three part process – warming up and cooling down as just as important as the main exercise itself.



## Warm up

Always warm up with light exercise at the start of the session. This is very important! This prepares your body for exercise safely.

By gradually increasing the workload of your heart, it is able to adapt slowly by being made to work harder. This is much safer than suddenly increasing the workload. It helps reduce the risk of angina and disturbances in heart rhythm, by ensuring the coronary arteries are opened up and your heart has a good supply of oxygen.

Include pulse raising activities – walking, marching on the spot, low level cycling, followed by stretching the muscles you will be using thus reducing risk of injury.

The level of effort you put into these warm up and cool down exercises can be measured using something called ‘the Borg Scale’ (shown on pages 8 and 9).

Ideally, the warm up should last 15 minutes; you are then ready to start your main exercise session.

### Main exercises (see example on page 18)

To start with, the circuit will consist of a mixture of cardio and resistance exercises. Your starting level will be Red, meaning you will do 10 minutes of cardio exercises and 10 minutes of resistance exercises alternately. During all resistance exercises we ask that you keep your feet moving to maintain a raised pulse. As you progress through the course, you will move through the levels from Red to Orange (14 minutes cardio and six minutes resistance exercises). If manageable for you, may then progress to Green (20 minutes of cardio exercise) - see the target exercise table on page 3. The instructor will let you know if there are any changes to your level at the beginning of each session.

### Cool down

It is important to leave enough time at the end of your session to cool down properly. Gradually slow your pace during the cool down. The goal is to bring your body back to its resting state.

- A cool down for 10 minutes reduces the risk of fainting or dizziness that could result from a drop in blood pressure if you just suddenly stopped exercising.
- Cooling down reduces the risk of disturbances in your heart rhythm

that could happen if you stop exercising suddenly.

- Stretching during the cool down helps to reduce any muscle soreness that may be caused by the activity.

## Safety advice

If you experience any pain while exercising **STOP** whatever you are doing, no matter where the pain is coming from! You should never experience any pain during or after physical activity. If you are in the middle of a class, tell one of the members of staff immediately.

## Other reasons to stop exercising

Listen to your body and stop exercising immediately if you experience any of the following:

- Pains or tightness in the chest.
- Palpitations.
- Excessive shortness of breath.
- Dizziness or feeling faint.
- Pain, swelling, stiffness in joints.
- Excessive sweating.
- Sickness or nausea.

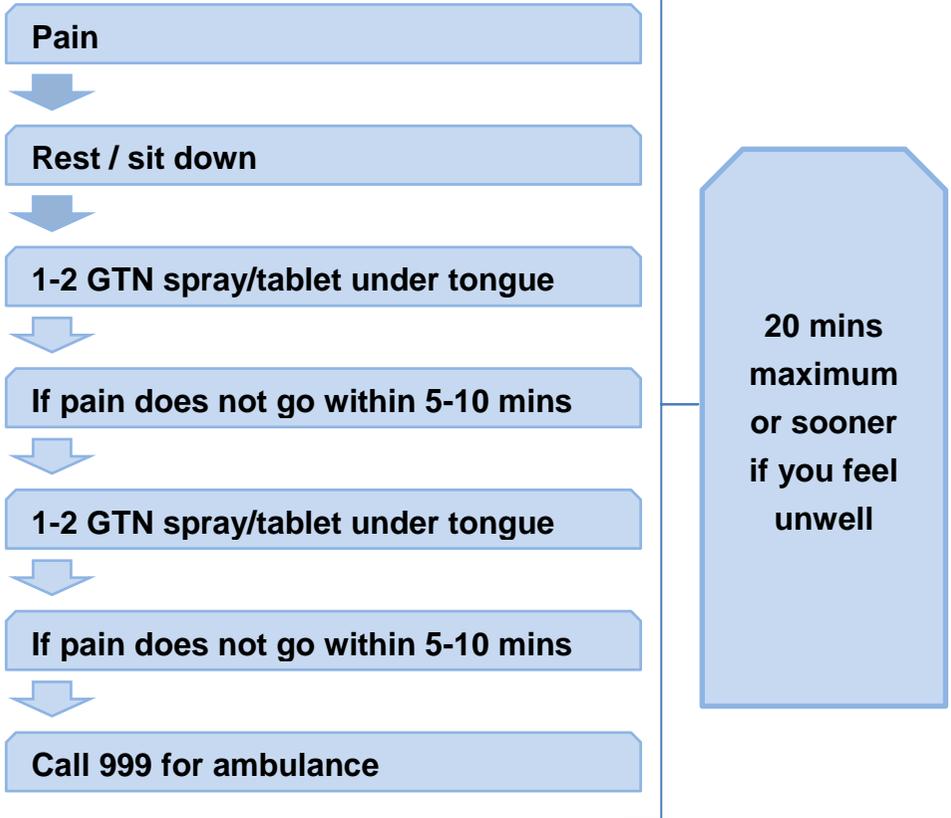
## What to do if you have angina while exercising alone

Angina is an uncomfortable heaviness or tightness in the centre of the chest, which may spread to the arms, neck, jaw, face, back or stomach. Use your Glyceryl Trinitrate (GTN) spray or tablets (if you have been given these). This will increase the supply of blood to your heart and help relieve the discomfort.

## When not to exercise

- If you experience chest pain.
- If a health professional has told you not to.
- If you are feeling ill or have a temperature.
- If your blood pressure is 180/100 or above.

## What to do if you get chest pain



- If at any point your pain becomes worse or you feel unwell (eg dizzy, sweaty, short of breath) please call 999 for an ambulance immediately.
- If pain is relieved but episodes of angina are more frequent or taking

longer to go away, please arrange to see your GP to be reviewed.

- If you notice your angina has started to happen at night or when resting, it is important to make your GP aware of your new symptoms.

## How hard should you be working?

### Measuring your heart rate

Your heart rate is a very useful indicator of how hard you are working.

During exercise your heart rate will increase in response to the demand of the working muscles to supply blood and oxygen.

We will give you a recommended heart rate range when you start to exercise. This range is related to you, your diagnosis and your medication, so everyone will be different. Your target heart rate is just a guide.

### Talk test

This is another simple way of assessing how hard you are working. Try having a conversation while exercising. If you are able to speak in complete sentences and are only a little out of puff, then you are working at the correct level. If you find yourself gasping and short of breath, then you are working too hard and need to slow down.

### Effort Scale (Borg Scale)

Another way of measuring how hard you are working is to measure your level of effort and give it a score between 1 and 10.

During exercise pay close attention to how hard you feel you are working. This feeling should reflect your total amount of exertion and fatigue, combining all sensations and feelings of physical stress, effort and tiredness.

See overleaf for the complete Borg Scale.

Modified Borg Rating of Perceived Exertion Scale (1-10)			
0	SING	REST	
1		REALLY EASY	
2		EASY	
3	TALK	MODERATE 	
4		SORT OF HARD 	
5	GASP	HARD	
6			
7		REALLY HARD	
8			
9			REALLY, REALLY HARD
10			MAXIMUM (LIKE HARDEST RACE)

## Your personal risk factors

During your assessment we will identify your personal risk factors and during the course provide you with further information with health promotion talks. We encourage you to speak with us individually about your personal goals, as we are here to provide support in aiding you to achieve them.

High Blood Pressure

Yes  No

Smoking

Yes  No

Everybody should aim to be a non-smoker. Stopping smoking is the single most important thing a smoker can do to live longer!

[www.nhs.uk/smokefree](http://www.nhs.uk/smokefree) [www.smokefreelifeberkshire.com](http://www.smokefreelifeberkshire.com)

Cholesterol

Yes  No

Date: \_\_\_\_\_ Cholesterol Total: \_\_\_\_\_ HDL: \_\_\_\_\_

LDL: \_\_\_\_\_ Triglycerides: \_\_\_\_\_ Ratio: \_\_\_\_\_

Aim to keep your total cholesterol under 4mmol/l and low density lipoproteins (LDL) under 2mmol/l. We advise you to have your cholesterol checked three months after your heart surgery, heart attack or stent insertion. Reducing cholesterol can be achieved through changes in diet and taking cholesterol lowering medications.

Diabetes

Yes  No

The main aim when diabetic is to keep your blood glucose as close to the normal range as possible. Ask your GP's practice nurse for advice on managing your diabetes.

## Exercise

Yes  No

Aim to do around 30 minutes of moderate activity, such as walking, cycling, dancing and exercises classes at least five times a week. Generally, exercises that involve plenty of large muscle (leg) movements are good. Moderate exercises means you are able to talk during exercise but feel a little short of breath (Borg Scale 3-4). An exercise diary has been provided with an example. If new to exercise or are aiming to increase exercise, this is a good way of recording your progress and activity levels.

## Diet and Weight

Yes  No

Aim to eat a healthy diet rich in fruit, vegetables, bread and cereals. Eat less sugar and salt! Your body mass index (BMI) should be maintained between 20-25.

## Alcohol

Yes  No

Men and women should drink less than 14 Units per week (2 -3 Units max per day). As Units can be misleading you can use a Unit calculator to check on these. This can be found at: [www.drinkaware.co.uk](http://www.drinkaware.co.uk). As a guide, 1.4 Units is either 35ml of spirit, 125ml (small glass) of wine or half pint of normal strength beer.

## Anxiety and Stress

Yes  No

Stress has many meanings but most people think of stress as not being able to cope with the demands of life. Stress and the effect it has on the body is linked to heart disease. Therefore, learning how to relax is very important. Whilst a moderate amount of stress can be helpful, too much stress can be detrimental for us. It is important that you recognise the signs of stress and anxiety. Please find information at: [www.talkingtherapies.berkshire.nhs.uk](http://www.talkingtherapies.berkshire.nhs.uk)

## Your personal goals

The box below is for you to write your personal goals. Each goal should be specific, measurable, agreed, realistic and timely.

As a guide you may wish to make 2-3 personal goals.

Example: "I agree to increase exercise through walking 30 minutes a day three days a week for the next six weeks while on the exercise programme."

Your goals will be reviewed throughout your programme.

## Individual goals

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## Personal goals discussed and agreed

Patient signature: \_\_\_\_\_ Date: \_\_\_\_\_

Cardiac specialist signature: \_\_\_\_\_ Date: \_\_\_\_\_

# Cardiac Rehab Scores Pre and Post Programme

## Pre Assessment

Weight \_\_\_\_\_ BMI \_\_\_\_\_ Waist Circumference \_\_\_\_\_

Chester Step Test time \_\_\_\_\_ METs Achieved \_\_\_\_\_

Walk Test Distance \_\_\_\_\_ METs Achieved \_\_\_\_\_

## Post Assessment

Weight \_\_\_\_\_ BMI \_\_\_\_\_ Waist Circumference \_\_\_\_\_

Chester Step Test time \_\_\_\_\_ METs Achieved \_\_\_\_\_

Walk Test Distance \_\_\_\_\_ METs Achieved \_\_\_\_\_

Functional Test Improvement \_\_\_\_\_

Date: \_\_\_\_\_ Cholesterol Total: \_\_\_\_\_ HDL: \_\_\_\_\_

LDL: \_\_\_\_\_ Triglycerides: \_\_\_\_\_ Ratio: \_\_\_\_\_

## Long term goals

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## Exercise is important as it can:

- Help to prevent more heart problems in the future.
- Help increase the blood flow to the heart muscle.
- Reduce stress, making you feel happier and help you sleep better.
- Help to reduce your blood pressure.
- Help you to lose weight.
- Help to lower your cholesterol level.
- Help to reduce angina and breathlessness.
- Reduce aches and pains from joints and muscles.



## How to increase your physical activity

- Walk to the local shops to collect the newspaper and other essentials.
- Park the car in the farthest car space and walk to the supermarket.
- Get off the bus one stop earlier and walk the remainder.
- Try to use the stairs rather than the lift or escalator.
- When ironing, put some of the ironed clothes away mid iron so you double the activity.
- When doing tasks like housework or DIY, put some motivating music on. It will make the task more enjoyable and speed up your movements.
- Play ball in the park with your children/grandchildren.
- When gardening, take breaks and walk briskly around for 10 minutes before resuming your tasks.
- Take the dog for a walk (or borrow one for a walk).

## Planning your exercise

Use a diary to help you fit activity into your daily life and plan your progress. For example:

Day	Activity	Week 1	Week 2	Week 3	Week 4
Monday	Walk	15 mins	20 mins	25 mins	30 mins
Tuesday	Class	1 hour	1 hour	1 hour	1 hour
Wednesday	Walk	15 mins	20 mins	25 mins	30 mins
Thursday	Swim	10 mins (rest every 2 mins)	10 mins (rest every 2.5 mins)	12 mins (rest every 3 mins)	12 mins (rest every 4 mins)
Friday	Walk	15 mins	20 mins	25 mins	30 mins
Saturday	Golf	9 holes with buggy	9 holes with buggy	9 holes with buggy	9 holes without buggy
Sunday	Rest				

## Exercise diary

Date	Exercise/physical activity	How hard was it? (Borg Scale)	Duration of activity?
22/09/15	<i>Walked to local shops</i>	2	10 mins
23/09/15	<i>Bike ride</i>	4	25 mins



## Example exercise circuit

	Station 1	Station 2	Station 3	Station 4	Station 5
<b>Red</b> 1 minute AR / 1 minute CV	Pectoral Fly Bike / Knee Raises	Bicep Curl Half Star	Upright Row Walk or Jog	Tricep Pulls Steps	Side Arm Raises Leg Curls/Squats
<b>Orange</b> 1 minute AR / 1 minute CV	Bike / Knee Raises 2 minutes	Bicep Curl Full or Half Star/ Trampoline	Walk or Jog Upright Row	Steps 2 minutes	Side Arm Raises Leg Curls/Squats
<b>Green</b> 2 minutes CV	Bike / Knee Raises	Full or Half Star/ Trampoline	Walk or Jog	Steps	Leg Curls/Squats

## An example of a walking programme

Most people walk as part of their everyday life. Everybody's ability is different so please talk to an instructor for advice as to where to start on this programme.

<b>Stage 1</b>	<b>Frequency: 2-3 times a week</b>	<b>Duration: 12 minutes</b>
<b>Intensity:</b> Easy to comfortable pace during the first six minutes, at a slightly faster pace to return (six minutes). Walk at a slower pace when nearing the destination.		
<b>Stage 2</b>	<b>Frequency: 4-5 times a week</b>	<b>Duration: 14 minutes</b>
<b>Intensity:</b> Easy to comfortable pace during the first seven minutes, at a faster pace on return (seven minutes). Walk at a slower pace as you reach the destination.		
<b>Stage 3</b>	<b>Frequency: 4-5 times a week</b>	<b>Duration: 20 minutes</b>
<b>Intensity:</b> Easy to comfortable pace during the first 10 minutes. On the return journey, alternate normal pace with some brisk walking. Finish the walk with a cool down phase, beginning at a normal walking pace and reducing the walking speed to a slow pace.		
<b>Stage 4</b>	<b>Frequency: 4-5 times a week</b>	<b>Duration: 25 minutes</b>
<b>Intensity:</b> Comfortable pace on first 10 minutes. Walk briskly as much as you can for the second part of your walk. Finish the walk with a cool down phase, beginning at a normal walking pace and reducing the walking speed to a slow pace.		
<b>Stage 5</b>	<b>Frequency: 4-5 times a week</b>	<b>Duration: 30 minutes</b>
<b>Intensity:</b> Comfortable pace on first 10 minutes, gradually increasing the speed to a brisk walk for a further 10 minutes. Finish the walk with a cool down phase, beginning at a normal walking pace and reducing the walking speed to a slow pace.		

Gradually increase the duration and distance of walking, before increasing your speed. It is useful to alternate brisk walking with a slower speed to build up the intensity gradually. You should never be breathless (max on Borg Scale 3-4). Always include a warm up and cool down.

## Relaxation

Relaxation has many benefits for health as well as helping you to:

- Reduce stress.
- Cope with problems.
- Increase your feeling of being in control.
- Lower your blood pressure and heart rate.

## Deep muscle relaxation

This technique takes around 20 minutes. It stretches different muscles in turn and then relaxes them, to release tension from the body and relax your mind.

**Only do this technique at home after you have been taught it in class. Do not hold your breath while doing these exercises.**

- Find a warm quiet place with no distractions. Get completely comfortable, either sitting or lying down. Close your eyes and begin by focussing on your breathing; breathing slowly and regularly.
- If you have pain in certain muscles, or if there are muscles that you find difficult to focus on, spend more time on relaxing other parts.
- You may want to play some soothing music to help relaxation. As with all relaxation techniques, deep muscle relaxation will require a bit of practice before you start feeling its benefits.
- For each exercise, hold the stretch for a few seconds, then relax. Repeat a couple of times. It is useful to keep to the same order as you work through the muscle groups.

**Face:** push your eyebrows together, as though frowning. Release.

**Neck:** gently tilt your head forward, pushing your chin down towards your chest. Slowly lift it up again.

**Shoulders:** pull them up towards your ears (shrug), and then relax them down towards the floor.

**Chest:** breathe slowly and deeply into your diaphragm (below your bottom rib) so you are using the whole of your lungs. Then breathe slowly out, allowing your belly to deflate as all the air is exhaled.

**Arms:** stretch the arms away from the body, reach, and then relax.

**Legs:** push your toes away from the body, then pull them towards you, then relax.

**Wrists and hands:** stretch the wrist by pulling the hand up towards you. Stretch out the fingers and thumbs, and then relax.

## What happens once I've finished the programme?

We can refer you on to a GP prescription scheme, where you can take part in a circuit class or supervised gym session. Please ask your instructor for more information on classes.

Reading Pathway Scheme	Rivermead Leisure Centre Palmer Park Sports Centre Meadway Sports Centre	0118 901 5003 0118 901 5080 0118 937 5060
Wokingham Active Hearts	Loddon Valley Leisure Centre St Crispins Leisure Centre	0118 931 2066 0118 979 1066
West Berks Activity for Health Scheme	Cotswold Sports Centre Northcroft Leisure Centre Hungerford Leisure Centre The Lambourne Centre	0118 941 4690 01635 31199 01488 683303 01488 73690
Henley Healthwise	Gillotts Lane Leisure Centre	01491 577909
East Berks Activate THROB	Bracknell Leisure Centre Crownwood / Winkfield Heart Rehab Organisation Windsor / Slough/ Maidenhead	01344 353156 07966 295873

## Useful contacts

Heart Helpline	03003 303311
Cardiac Support RBH	01183 226638
Smokefreelife Berkshire	08006 226360
Talking Therapies	03003 652000
WestCall (out of hours GP service)	NHS 111
Patient Relations RBH	0118 322 8338
HeartBeats Support Group (info/membership)	0118 984 4750
HeartBeats Reading	0118 942 6105
HeartBeats Newbury	01635 861546
HeartBeats Wokingham/Earley	0118 926 4260
<a href="http://www.walkingforhealth.org.uk">www.walkingforhealth.org.uk</a>	
<a href="http://www.bhf.org.uk">www.bhf.org.uk</a>	

This leaflet is printed privately for the Cardiac Fund. It was set up in 1976 for the purpose of providing cardiac services that would otherwise not be available through National Health resources. Our Cardiac Laboratory was largely equipped through the fund and many other areas in the Department have also benefited from equipment and staff training.

If you would like to contribute, cheques should be made payable to:

The Cardiac Fund, and sent to one of us.

Dr Nicos Spyrou BSc MD FRCP, Dr Will Orr FRCP

Dr Charlie McKenna BSc MD FRCP, Dr Jon Swinburn MA MD MRCP

Dr A Elkington MD FRCP, Dr Sachdev BSc MBBS MRCP

Dr Lindsey Tilling MRCP PhD, Dr Sacha Bull MA MRCP D Phil

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This document can be made available in other languages and formats upon request.

Cardiac Rehabilitation Team, November 2018.

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