

# Cardiac Rehabilitation for Patients Post Cardiac Surgery

Cardiology

This booklet aims to provide information on Cardiac Rehabilitation services for patients with coronary heart disease (CHD).

## Contact details

Cardiac Rehabilitation Service  
The Royal Wolverhampton NHS Trust for Wolverhampton and Cannock Hospitals  
First Floor B2  
Heart and Lung Centre  
New Cross Hospital  
Wolverhampton  
WV10 0QP

Working days Monday - Friday Excluding Bank Holidays.

Telephone: 01902 694226

E-mail: [rwh-tr.cardiacrehabteam@nhs.net](mailto:rwh-tr.cardiacrehabteam@nhs.net)

## List of Local Cardiac Rehabilitation Teams

### Walsall

Heart Care (Phase 3 and 4- exercise and education)

Tel: 01922 725 050

### Dudley

Action Heart Centre

Tel: 01384 456 111 ext. 1470

### Stafford

County Hospital

Tel: 01785 257 731 ext: 3605

### Royal Stoke

Tel: 01782 674 094

### Telford

Princess Royal Hospital

Tel: 01952 641 222 ext: 4457

The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

**Shrewsbury  
Royal Shrewsbury Hospital**

Tel: 01743 261 463

**City Hospital**

Tel: 0121 5075 562

**Kidderminster Hospital**

Tel: 01562 512 315

**Worcester Hospital**

Tel: 01905 733 710

**Or finder**

[www.cardiac-rehabilitation.net/cardiac-rehab.htm](http://www.cardiac-rehabilitation.net/cardiac-rehab.htm)

## Wolverhampton and Cannock Cardiac Rehabilitation Services

The Cardiac Rehabilitation team provides advice and guidance to patients admitted to the Heart and Lung Centre with a heart attack and following surgical intervention (angioplasty, coronary artery bypass graft or valve surgery). A member of the team will contact Wolverhampton and Cannock patients by telephone, to review your progress. Patients can telephone direct and leave non urgent messages on the answer machine. If you have chest pain call 999, for all other medical problems contact your GP.

## The following outpatient services are provided for patients with coronary heart disease:

- An Education Programme
- 8 to 12 week Exercise Programmes. Supervised exercise sessions are held in the hospital and in local leisure centres
- A Stress Management Programme
- Long term supervised exercise sessions
- Referral to other services as required e.g., Dietitian.

## An introduction to stress

Stress is caused by environmental factors which exert undue strain or pressure upon a person.

### Some signs of stress:

- Headaches
- Nausea
- Short temper
- Palpitations
- Change in appetite.

## Examples of relaxation techniques:

- Breathing exercises
- Exercises
- Muscle relaxation
- Imagery
- Complimentary therapies.

You can learn more at a stress management programme. Ask your local Cardiac Rehabilitation team for details.

# An introduction to exercise following heart surgery

## Why exercise?

Exercise will improve the efficiency of your muscles in using oxygen. This puts less strain on the heart, as it will not have to beat as hard or as fast with activities of moderate intensity.

Exercise will help to control many of the factors that could have led to heart disease. These include high blood pressure, high cholesterol, being overweight, the effects of smoking, stress and diabetes.

## How much exercise?

It is important to begin gradually, with just a few minutes of exercise initially. Aim to gradually build up to 30 minutes of moderate intensity exercise or physical activity on at least five days of the week, or at least 150 minutes a week. This section of the booklet gives you some guidance to help you with your exercise routine.

## Immediately after your operation

Heart surgery results in a temporary reduction in lung volume, leading to diminished air entry into the lower parts of the lungs. Thoracic expansion exercises (deep breathing) aim to expand the lungs fully and aid the removal of phlegm if present.

- Practice breathing in through your nose as deeply as possible, hold for three seconds and then out through your mouth in a relaxed manner. Repeat five times every 30 minutes
- Try not to slump – sit upright in your bed or chair
- A physiotherapist will see you on the day after your surgery to remind you of these exercises.

## Before going home

The physiotherapist will help to get you back on your feet and increase your walking and independence as soon as possible. The frequency of treatment will depend on your needs. You will start with a few short walks around the ward with some assistance and progress to walking around the ward independently. Before you go home you will be asked to climb a flight of stairs. You will also be taught some exercises to reduce stiffness in your neck, shoulders and back.

## Flexibility and mobility exercises

These exercises have been chosen to improve mobility after heart surgery. The exercises can be performed sitting in a firm chair or standing up. You may find doing these exercises first thing in the morning, at mid-day and again before you go to bed helpful. You can also use the exercises as part of your warm up before a walk.

**Repeat each exercise five times.**

- Slowly lift your head up to look at the ceiling and then take it down to look at the floor
- Slowly turn your head to look over your left shoulder and then turn to look over your right shoulder
- Slowly bend your head to the side taking your left ear towards your left shoulder. Repeat on the right
- Arms relaxed by your side, raise your shoulders towards your ears and circle your shoulders backwards. Now repeat circling your shoulders forwards
- Gently link your fingers in front of your body and straighten your arms away from your chest. Now, keeping your arms straight, raise your hands above your head. Finally, release your fingers and stretch your arms out to the side and lower them down
- Stand up straight with your feet hip width apart and your arms relaxed by your side so that your hands are touching your thighs. Gently slide your left hand down your thigh towards your knee. When you have reached your limit return to the centre and repeat with the right hand. Do not lean forward

- Stand up straight with your feet hip width apart and place your hands on opposite shoulders, crossing your arms across your chest. Twist at the hips to turn to the left and then to the right. Repeat with your hands on your waist.

## Home activity following heart surgery

### Walking guidelines

- Always allow yourself time to warm-up before exercising and cool down afterwards. You can do this by walking at a slower pace for approximately five minutes before and after your moderately paced walk and / or by doing the flexibility and mobility exercises.

Below is an example of a walking plan. This can be adapted to your individual needs.

Week	Warm Up (minutes)	Walk (minutes)	Cool Down (minutes)	Exertion *(RPE)
1	5	5	5	12 – 13
2	5	10	5	12 – 13
3	5	15	5	12 – 13
4	5	20	5	13
5	5	25	5	13
6	5	30	5	13

Thereafter try to accumulate at least 150 minutes of moderate intensity activity a the week.

This can be achieved by doing three 10 minute sessions of activity / exercise, or by doing two 15 minute sessions for example, or by doing 30 minutes activity on five days a week.

\* *RPE is explained on next page*

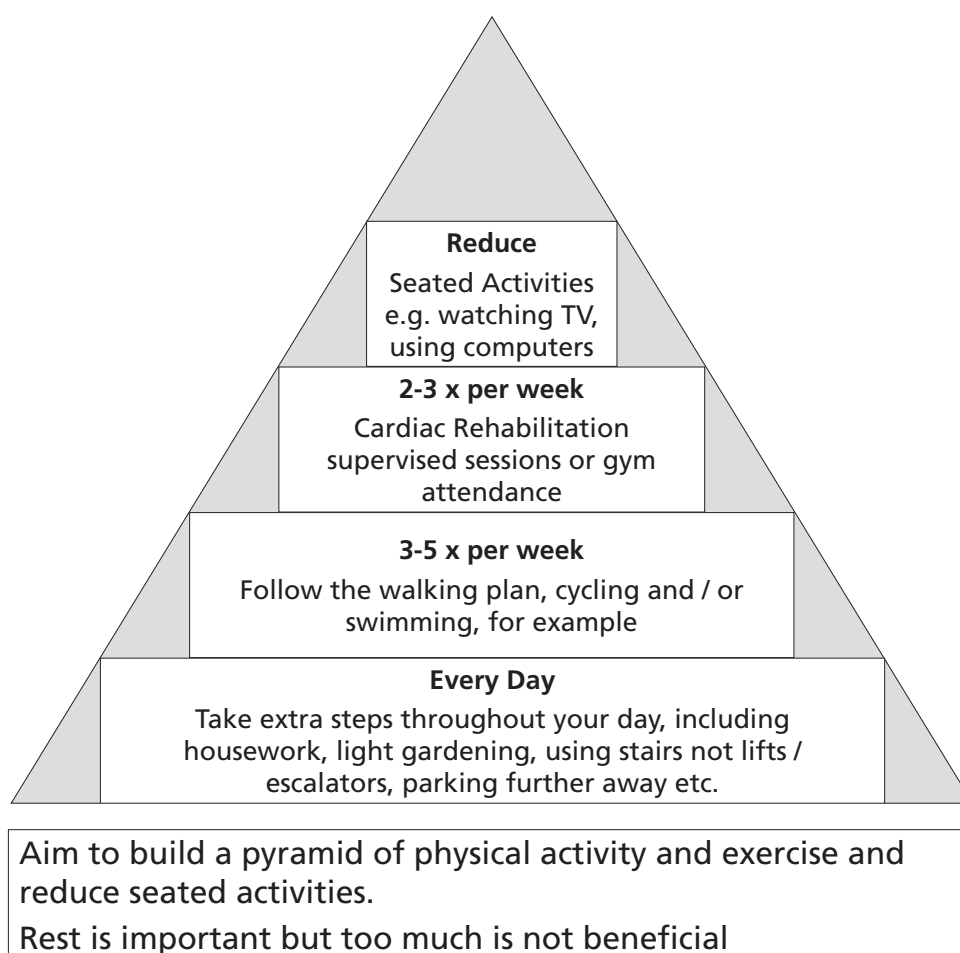
### Rating of Perceived Exertion (RPE)

- 6 No exertion at all
- 7 Extremely light
- 8
- 9 Very light
- 10
- 11 Light
- 12
- 13 Somewhat hard, breathing slightly heavier than normal.
- 14
- 15 Hard
- 16
- 17 Very hard
- 18
- 19 Extremely hard
- 20 Maximum exertion

## Please note:

- It is normal to get comfortably short of breath in order to improve your fitness, but you should be able to hold a conversation whilst exercising
- Exercise should be of moderate intensity (12 to 13 RPE)
- Be aware that exercise is harder in very hot or very cold weather
- Exercising at moderate intensity should not cause angina or severe shortness of breath. If the frequency and / or severity of your symptoms are increasing, or occurring at rest please see your GP as soon as possible or speak to a member of the cardiac rehabilitation team for advice.
- Do not exercise for at least one hour after a meal.

***Stop if you have ANY chest pain, severe shortness of breath, dizziness or muscle cramp with any physical activity***



## Guidelines for return to general activity following heart surgery

- **Housework** - You can start light housework, such as dusting, light cooking and helping to tidy up at meal times during the first four to five days at home
- **Gardening** - Light gardening can begin once you feel fit and able, but avoid digging or mowing the lawn for 12 weeks
- **Shopping** - Make sure that you are able to walk a good distance comfortably before going to a supermarket or shopping around town, and avoid carrying shopping bags for 12 weeks. Never carry very heavy bags

- **Driving** - You may legally resume driving four weeks after your heart surgery, providing you have no symptoms of angina, but follow the advice given by your Surgeon. You need to inform your insurance company that you have had heart surgery. LGV and PSV licence holders need to inform the DVLA
- **Sex** - Resume sexual activity as soon as you feel ready. Find a comfortable position which restricts neither your breathing nor your wound. Treat sex like any other activity. If you are tired and tense wait until you feel better
- **Work** - Returning to work depends on the nature of your job. You may return to work 8 weeks after heart surgery if your job is not physically demanding or only light duties are involved. If you have a physically demanding job you need to discuss this with your doctor / surgeon
- **Sports and hobbies** - Sports and hobbies that use your arms heavily (e.g., Swimming, golf, fishing, and heavy gardening) should be avoided until your breastbone has healed (approximately 12 weeks). Once your breastbone has healed these activities can be reintroduced gradually
- **Holidays** - It is acknowledged that patients who have experienced a cardiac event can safely and legally undertake air travel at a relatively early stage in their recovery. This often happens when, for example, patients are repatriated after experiencing a cardiac event on holiday abroad. However, it is generally accepted that it would be preferable for patients to seek medical advice, preferably from their Surgeon, prior to planning to travel by air. You may need to seek specialist travel insurance cover which can prove to be more difficult / expensive to obtain, particularly in the first 12 months after their event
- A list of insurance companies can be obtained from the British Heart Foundation (BHF) at the address overleaf.

## What to do if you have anymore chest pain

You may or may not experience some chest discomfort / pain (angina) once you have gone home. However, should you experience these symptoms you should be guided by the following advice (as identified by the BHF):

- Ensure you have your Glyceryl Trinitrate (GTN) spray (or tablets) with you at all times
- In the event you do experience any chest discomfort / ache (pain) and / or breathlessness, sit down, rest and use your GTN spray or tablets (as directed)
- If the pain does not subside after 5 minutes use your GTN spray or tablets again and wait a further 5 minutes
- And, if the pain does not subside within 10 minutes dial 999 for an ambulance.

## Additional Information can be found at:

### **British Heart Foundation**

Greater London House,  
180 Hampstead Road, London  
W1H 6DH  
Tel: 0207 554 0000.

Heart Information Helpline: 0300 330 3311

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

### **Driver and Vehicle Licensing Agency**

The Medical Adviser  
Driver Medical Group  
DVLA  
Longview Road  
Morrison  
Swansea  
SA99 1TU

E-mail [medadviser.dvla@gtnet.gov.uk](mailto:medadviser.dvla@gtnet.gov.uk)

## **Expert Patient Programme**

This is an NHS self-management programme delivered by lay people for anyone living with any long term health condition.

Website: [www.expertpatients.nhs.uk](http://www.expertpatients.nhs.uk)

## **Heart UK**

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

Twitter

Facebook

## ***Wolverhampton***

### **Wolverhampton Coronary Aftercare Support Group**

There are regular patient and carer partnership events where you obtain more information about heart disease. The group has a team of trained volunteers who are Patient Friends, keen to reassure you by sharing their own experiences.

Telephone: 01902 755695

Mobile: 07889 063647

Email: [wcasg79@gmail.com](mailto:wcasg79@gmail.com)

Website: [www.have-a-heart.net](http://www.have-a-heart.net)

For details of how to contact your local support group, please contact your local cardiac rehab centre.

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。