



Physical Activity and Vision Rehabilitation

**A Guide for Vision Rehabilitation
Workers Supporting
Blind and Partially Sighted
Adults Through Physical Activity.**

**Produced in partnership with British Blind Sport,
Metro Blind Sport, Rehabilitation Workers
Professional Network, Visionary, The Wilberforce
Trust and North East Sensory Services**

Foreword

Physical movement and the way that lack of vision impacts on this, is at the heart of vision rehabilitation practice. Whether it is Orientation and Mobility training: teaching someone safe techniques for how to move around their home or to get from A to B in the built environment or ensuring that someone has the stamina and strength to be able to stand long enough to prepare and cook a meal and carry pots and pans from the cooker to the worktops and tables. Most daily tasks require strength, balance and stamina.

When Vision Rehabilitation Workers assess someone's ability to achieve any such tasks, they assess the way the physical and mental wellbeing of the client impacts on the situation. A Vision Rehabilitation Worker would support the client to identify the things that are holding them back from being more mobile and would then devise their teaching accordingly. If the barrier to becoming more mobile is not just sight loss, but is related to stamina, fitness or inactivity, why wouldn't the professional factor that into their programme of training? Why should it be that regaining confidence in your ability to move around is only the preserve of the keep-fit class or the gym?

When a Vision Rehabilitation Worker works with someone who has recently lost most of their vision, the starting point is often to work on pre-cane skills and orientation – getting the groundwork right before moving on to “the big outdoors”. In the same way, encouraging someone's strength and balance is setting the groundwork for those elements of mobility heavily dependent on fitness. These include being safer on stairs, carrying a load, bending over, walking faster and maintaining good posture.

Yet Vision Rehabilitation Workers are not time rich! There is frequently pressure to achieve goals and move on. This resource is intended to provide the profession with helping people reach those goals more securely. This resource provides guidance on what can be achieved in situations where we feel that improved strength, balance and stamina is the key to achieving daily living goals, and particularly where there are limited options for getting this support from other people or organisations. For some clients, it may be that the role of the Vision Rehabilitation Worker is to promote these messages and motivate; others may want to help the client identify a safe place in the home to do the exercises and leave it with them. Others may want to be more involved in the process and observe and work in parallel. A referral to physiotherapy may still be needed if there are underlying medical conditions.

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This pack has been produced through partnership between Visionary, Rehabilitation Workers Professional Network, British Blind Sport, Metro Blind Sport, The Wilberforce Trust and North East Sensory Services



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Rehabilitation and Physically Activity Introduction

This pack has been designed to give you some ideas of different exercises which can be shared with clients and can be done safely in their own homes. Exercises have been designed to help build strength, improve flexibility, increase cardiovascular capacity, and enhance an individual's balance.

The activities included are low intensity and it is not expected that participants will break into a sweat or be short of breath. This resource is divided into sections and aims to provide a guide for you and your clients. Please remind your clients to take part at their own pace and to remember that any increase in physical activity will be beneficial to them.



Section 1

Benefits of physical activity

There are many reasons why physical activity is good for your body – having a healthy heart and improving your joints and bones are just two, but physical activity can also be beneficial for your mental health and wellbeing.

Here are just some of the potential benefits.

- Improved circulation which helps to ward off heart conditions
- Improved bone strength
- Improved muscles and joint strength
- Improved weight management
- Improved sleep
- Improved mobility and co-ordination



Recommended Activity Levels

Just 18% of 16-34-year-olds are inactive, but this figure rises to 27% of 55-74-year-olds and 49% of over 75s. The Chief Medical Officers of each of the four UK countries define an inactive person as someone who does not achieve a total of 30 moderate intensity equivalent minutes of physical activity over the course of a week.

Being active does not mean that we have to go to the gym every day or run for an hour. There are so many ways to be active and they can all help to improve both physical health and mental health. Vision Rehabilitation Officers are already skilled at encouraging participants within their own environments; hopefully the ideas included will enable you to support clients to be a bit more active more often.

Why be More Active

By being more active we can stay healthier for longer. Being in good health allows us to remain independent, to work and be involved in our local community, to maintain relationships with friends and family, and to carry out the day-to-day activities that enable us to lead a full and active life. Those who are least active can experience significant improvements in their health and happiness from being just a little more active every day.

Accessibility of Physical Activity

Physical activity can be accessible to all. The activities included in this pack can all be easily completed in the home without specialist equipment. Most other activities can be made accessible to blind and partially sighted people, with some adaptations, specialised equipment or detailed audio descriptions.

Encourage Your Client to be More Active

Everyone has different needs and preferences, so you should consider your client's particular situation before starting an exercise routine. If physical activity is new to them, it is best to build up their ability gradually. Focus on task goals, such as improving stamina, rather than competition. Encourage them to keep a record of activity, or a mental track of how much they are doing and review it to provide feedback on their progress. There are many apps and social networks accessible for free to help. A quick walk counts as exercise.

The chair-based exercises included in this pack are appropriate for clients who are inactive and are less mobile.

Be Practical

Encourage your client to exercise once a week, then maybe twice, and then maybe 3 times. Build up slowly at a pace and a level that is right for your client.

Your client might like to do 30 minutes per day, or may prefer to split your time into more manageable sessions. What is important is that they work out what feels realistic for them at the moment. This may change from time to time, depending on how they are feeling, and what they are able to do. The important thing is to encourage them to start trying to increase activity levels, to assist them to find something that works for them.

Make it Fun

Find motivation for starting and continuing an exercise routine. Things as simple as listening to music, an audio book or a favourite radio show can help your client to stay motivated while working out. They can also help make exercise fun and enjoyable!



Myth Busting

"I'm visually impaired so I can't start exercising now"

It is a common misconception that blind and partially sighted people cannot fully participate in physical activity. Nothing could be further from the truth, however. There are countless ways of exercising, and blind and partially sighted people should be physically active, just like non-disabled individuals.

It has been well-documented that physical activity benefits individuals of all abilities, and there is no exception for blind and partially sighted people. There are countless activities people with sight loss can and do and participate in. Some may require modifications or special equipment, while others can be done with minimal or no assistance or adaptation.

Exercise professionals and sports coaches have the knowledge and can modify and tailor exercises for blind and partially sighted people, sometimes using specialist equipment, which makes for a safe and enjoyable experience.

"Exercise isn't safe for someone my age - I don't want to fall and break a bone."

Unless your client has been told this by a medical professional based on a specific condition or injury, this is likely fear talking. Not only does regular exercise help strengthen the body's stability, balance and flexibility, reducing the chances of a fall but it can also help strengthen bones.

"Trying to exercise and get healthy is pointless at my age."

Studies show that not only does a stronger body help older people stay upright and confident, but weight-bearing exercise can also ward off the onset of osteoporosis by helping maintain bone density.

"I have an illness so I shouldn't exercise."

On the contrary, if your client has a chronic health problem such as arthritis, diabetes, or heart disease, exercise is almost certainly a good idea. Check with a doctor first but exercise will probably help.

"I don't have time to do lots of exercise."

There is not a one size fits all as we are all different. The NHS recommends that adults should do some type of physical activity every day. Any increase in physical activity will have a positive impact on your client's health and well-being. Your client might like to do 30 minutes per day, or may prefer to split their time into short sessions. What is important is that they work out what feels realistic for them.

"It's too late to start exercising at my age."

Even if your client has never had a regular exercise routine before, it's never too late to start. "Better late than never" when it comes to exercise isn't just an adage; it's a statement backed by multiple studies. Exercising later in life can lower your risk of heart disease, high blood pressure, diabetes, and some types of cancer.



Section 2

Getting Started Safely

This section includes information for Vision Rehabilitation Workers that would need to be considered when working with clients. Before you commence any activities, please ensure that your clients have checked with their GP that the exercises will be suitable for them. Remind your clients that while exercising they should follow the guidance below.

- If they experience chest pain, dizziness or severe shortness of breath, stop immediately and contact their GP (or call an ambulance if they feel very unwell and their symptoms do not go away when they stop exercising).
- If they experience pain in their joints or muscles, stop, check their position and try again. If the pain persists, seek advice from their GP.
- If they have a feeling that their muscles are slightly sore the next day after exercise, that it is normal and shows that the exercises are working.
- To breathe normally throughout and enjoy themselves.

Check that the chair your client is using is sturdy and stable and encourage your client to wear comfortable clothes and footwear. Prepare the space and have any equipment ready and encourage your client to have a drink nearby. Remind your clients to complete a warm-up before they commence the activities. Warming up before starting activity helps prepare your body for aerobic activity. A warm-up increases the blood flow to the muscles and raises the temperature of the body. It also helps to reduce the risk of getting injured as your muscles are adequately warmed up, and the strain you put on them during your workout is less severe. This should also reduce muscle soreness. The warm-up is located on page 8 of this pack.

Section 3

Exercises

The exercises are listed into the following categories to build a balanced exercise plan.

- Strength
- Flexibility
- Cardio
- Balance

Warm up

March

- Sit tall at the front of the chair.
- Hold the sides of the chair.
- Move feet off the ground, one by one, marching with control.
- Build to a rhythm that is comfortable.
- Continue for about 1-2 minutes.



Shoulder Circles

- Sit tall with arms at sides.
- Lift both shoulders up to ears, draw shoulders back then press them down.
- Shoulders will feel as if they are rolling in circles.
- Repeat slowly up to 4 times.



Toe Taps

- Sit tall at the front of the chair.
- Hold the sides of the chair.
- Tap toes up and down at a speed that is comfortable.
- Continue for about 20 – 30 seconds.



Rowing

- Sit tall at the front of the chair.
- With hands together, reach out in front and pull arms back to one side and then the other (imagine paddling a canoe down a river).
- Continue for about 20 – 30 seconds.



Strength Exercises

Sitting Kicks

This can help to improve core strength.

- Sit tall at the front of the chair.
- Hold the sides of the chair.
- Straighten the knee of one leg. Hold leg up for 5 seconds.
- Do this up to 10 times. Repeat with other leg.



Chair Push-Up

This can help to improve arm strength and balance and assist with getting in and out of chairs independently.

- Sit tall at the front of the chair.
- Hold the sides of the chair.
- Lift buttocks off the seat of the chair by pushing down and straightening arms.
- Do this up to 5 times.



Arm Curl

This can help to maintain or improve muscle mass within the arms.

- Sit tall at the front of the chair.
- Use a weighted object to hold in one hand (e.g. a water bottle, tin, bag of sugar or rice).
- Lift fist that is holding the weighted object slowly towards shoulder, keeping wrist straight and elbow close to the side of the body.
- Slowly lower.
- Repeat up to 6-8 times on each arm.



Hip Opener

This can help strengthen the muscles on the side of the hip

- Stand tall with feet together.
- Raise right foot in front with your knee bent at a 90 degree angle.
- Rotate knee and foot to side, maintaining the 90 degree angle and keeping foot in line with knee.
- Return knee and foot to centre, and place foot back down on the floor next to the standing left foot.
- Repeat exercise 8-10 times, and then swap leg to raise the left foot.



Upper Back Strengthenener

This can help to strengthen muscles in the upper back.

- Sit tall at the front of the chair.
- Loosely hold a towel or belt with hands about 2 inches apart and the palms facing upwards.
- Lift the towel or belt a few inches and pull it apart tightly, keeping elbows against the ribs.
- Try not to let the elbows lift out to the side and keep wrists firm.
- Slide elbows towards the back of the chair and squeeze shoulders together.
- Hold for 2 or 3 seconds then relax.
- Repeat up to 8-10 times.



Arm Exercise With a Towel

This can help to strengthen the muscles in the arms.

- Sit tall at the front of the chair.
- Hold a towel with both hands.
- Pull upwards with one hand and downwards with the other as if trying to pull the towel apart.
- Hold for 5 seconds then relax.
- Make sure to keep arms close to the body during the exercise.
- Repeat up to 10 times.
- Swap hands over and repeat the other way.



Flexibility Exercises

Knee Raises

Knee raises can help to keep the quadriceps muscle, the largest muscle in the legs, flexible.

- Sit tall at the front of the chair.
- Hold the sides of the chair.
- Lift and lower one knee, then the other.
- Repeat this up to 10 times on each leg.



Toe Raises

This can help to strengthen or maintain the calf muscle. Keeping your calves flexible can help with moving up and down stairs.

- Sit tall at the front of the chair.
- Hold the sides of the chair.
- Gently rise up on the toes and rock back on heels.
- Repeat this up to 10 times.



Overhead Stretch

This can help to keep back and shoulders flexible.

- Sit tall at the front of the chair.
- Take a deep breath in and stretch arms up toward ceiling.
- Exhale and bring arms back down.
- Repeat this up to 10 times.



Spine Twist

This can help to maintain flexibility in the upper back.

- Sit tall at the front of the chair.
- Cross arms over chest and slowly twist upper body to one side.
- Try not to move the rest of the body.
- Repeat, twisting to the other side.
- Repeat this up to 10 times.



Overhead Side Stretch

This can help to improve the range of motion in the shoulders and upper back.

- Sit tall at the front of the chair but keep shoulders relaxed.
- Raise both arms straight up into the air, above head.
- Grab right wrist with left hand and gently pull the right hand up while leaning slightly left at the waist. Concentrate on pushing right buttock down against the seat of the chair. Hold for 10 seconds, then return to a vertical position.
- Grab left wrist with right hand and repeat the stretch on the other side, pulling the left hand up and slightly right at the waist while pushing your left buttock down against the seat of the chair. Hold for 10 seconds, then return to a vertical position.
- Repeat steps for each side of the body up to six times.



Cardio Exercises

Cardio activities can help to improve cardiovascular health. The below exercises will use different parts of the body to build endurance.

Toe Taps – Front

- Sit tall at the front of the chair and hold the sides of the chair.
- Start with your feet together under your knees. Step with your left foot forward to the front, tapping the ball of the foot onto the floor.
- Return to the starting position and repeat with the right foot.
- Continue alternating left and right toe taps to the front for about 20 seconds.



Toe Taps - Side

- Sit tall at the front of the chair and hold the sides of the chair.
- Start with your feet together under your knees. Step with left foot out to the side, tapping the ball of the foot onto the floor.
- Return to the starting position and repeat on the right side.
- Continue alternating left and right toe taps to the side for about 20 seconds.



Standing Kick

- Stand tall with feet together and arms by sides.
- Raise the left knee upwards and straighten the leg as if performing a kick.
- Lower leg and repeat on the right side.
- Continue alternating kicks with the left and right legs for about 20 seconds.



Arm Swings

- Sit tall at the front of the chair.
- Keeping elbows bent, swing arms back and forth.
- Arms can swing in the same direction, or in alternate directions.
- Continue swinging arms for about 20 seconds.



Boxing

- Sit up tall, do not lean on the back of the chair.
- Make a fist with each hand and raise them in front of the chest.
- Straighten one arm out in front, keeping fists closed.
- Bring this arm back into the side of the body and repeat with the other side as if you are slowly boxing.
- Repeat for up to 10 – 20 repetitions and then relax.



Balance

Single Limb Stance

This can help to improve balance and strengthen leg muscles.

- Stand behind a steady, solid chair (not one with wheels) and hold on to the back of it.
- Lift up right foot and balance on the left foot.
- Hold that position for as long as possible, then switch feet.
- The goal should be to stand on one foot holding onto the chair and hold that pose for up to a minute.



Back Leg Raises

This can help strengthen muscles in the bottom and lower back and improve balance.

- Stand behind a steady, solid chair and hold on to the back of it.
 - Slowly lift right leg straight back – don't bend knees or point toes.
 - Hold that position for one second, then gently bring leg back down.
- Repeat this up to 10 to 15 times per leg.



Marching in Place

This can help to improve leg muscles and can be a good cardio exercise.

- Stand behind a steady, solid chair and hold on to the back of it.
- Standing straight, lift the right knee as high as possible.
- Lower, then lift the left leg.
- Lift and lower legs up to 20 times.



Cool down

Repeat the warm-up at the start of the programme.

Section 4

Pathways for further activities

British Blind Sport (BBS)

The BBS Activity Finder is an innovative way for blind and partially sighted people, family members and professionals to search for VI-friendly clubs and community groups across the United Kingdom. The finder provides over 900 inclusive opportunities across the UK and can help blind and partially sighted people to access sport and physical activity.

To access the Activity Finder, head over to the BBS website:

<https://britishblindsport.org.uk/activity-finder/>

British Blind Sport also hosts an Active at Home programme, providing individuals with audio-led workouts, covering a wide range of activities such as Yoga, Pilates, HIIT, Boxercise and Strength. To find out more and access the programme, follow this link:

<https://britishblindsport.org.uk/the-active-at-home-programme/>



10 Today

10 Today is a set of fun 10-minute, audio and video routines intended to easily fit into an individual's day and help to get someone stretching and moving at home.

It has been designed by and for older people to keep individuals physically active, boost wellbeing, and help maintain mobility and balance.

Follow the link to access the audio 10-minute routines:

<https://www.bbc.co.uk/sounds/brand/p087wddm>

Parasport Inclusive Home Workout Zone

Parasport powered by Toyota is a resource to discover inclusive local opportunities to become more active. Prompted by the Covid-19 pandemic, Parasport have launched a 'Home Workout Zone', featuring a range of organisations with inclusive online activity that can be followed at home.

Head over to <https://parasport.org.uk/inclusive-home-workout-zone> to find out more.

Eyes Free Fitness

Mel who is blind, brought together a team of fitness instructors, musicians, and audio editors in order to provide a variety of exercise programmes for people who need or prefer non-visual cues while exercising. There are accessible audio-only workouts available, which will include yoga, Pilates, cardio, weightlifting, stability ball, Barre Method, a balance series, use of foam roller, stretching, and meditations.

Access the sessions by visiting the Eyes Free Fitness YouTube page:

https://www.youtube.com/channel/UCSJCXbR_C7lztG4us-8Hjw

Sense

Sense's activity finder will help you find things to get you motivated to move, create and explore. Search for activities using the activity finder at: <https://www.sense.org.uk/arts-sports-and-wellbeing/explore-our-activities/>

Metro Blind Sport

Metro Blind Sport provide opportunities and links to sport and physical activity for blind and partially sighted people. Visit their website to find out about the latest activities available:

<https://www.metroblindsport.org/>



Educational Resources and e-Learning

Coaching People with a Visual Impairment

Working with UK Coaching, British Blind Sport have created an award winning e- Learning course called 'Coaching People with a Visual Impairment'.

The course is suitable for anyone looking to support visually impaired people to take part in sport and physical activity and will help to:



- Gain a greater understanding of sight loss and eye conditions.
- Explore practical solutions to barriers to participation.
- Explore some of the safety considerations to ensure a fully accessible and inclusive environment for blind and partially sighted people.
- Learn how to make adaptations to specific elements of session planning and delivery using the STEP model.

Visit the UK Coaching website to access a free demo:

<https://www.ukcoaching.org/courses/elearning-courses/coaching-people-with-a-visual-impairment>

Learn at Home

UK COACHING

Understand
the importance of making
specific adaptations to your
sessions

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Developed with:
BRITISH BLIND SPORT
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Funded by:
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Coaching People with a Visual Impairment

LEARNING TECHNOLOGIES AWARD GOLD WINNER

Acknowledgements

This document is intended to be a resource for vision rehabilitation workers who work with blind and partially sighted adults to engage them in physical activity. The resource was developed in collaboration with British Blind Sport, Metro Blind Sport, Visionary, Rehabilitation Workers Professional Network, The Wilberforce Trust, and North East Sensory Services.

Disclaimer

The information provided is for educational purposes only and should not be interpreted as a specific treatment plan or course of action. Exercise is not without risk of injury, aggravation of pre-existing conditions or overexertion. The creators and partners of this resource cannot claim any liability for injury or loss resulting from the exercises, activities, or advice contained herein.

As with any exercise programme, if a participant feels faint, dizzy, or has physical discomfort during a session, he or she should stop immediately and seek medical attention. Any participant or provider assumes the risk of injury as a result of performing the exercises or activities described.

Always consult a healthcare professional for appropriate exercise advice and safety precautions.



Useful Contacts

British Blind Sport

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