Physiotherapy after stroke Stroke Helpline: 0303 3033 100 or email: helpline@stroke.org.uk

This guide explains how physiotherapy can help you to recover from some of the physical effects of stroke, and what treatment involves.

How can physiotherapy help after a stroke?

If you have lost movement in part of your body, physiotherapy can help you learn to move so that you can get around and be more independent. For example, it can help you learn to use your arm and hand in everyday activities as much as possible.

Physiotherapists often work with other professionals to help you with the range of problems that stroke can cause. You may be helped by occupational therapists, speech and language therapists, doctors, nurses and social workers. This is called the multidisciplinary team (MDT), or stroke team.

Some physiotherapists specialise in conditions caused by changes in the brain, such as stroke and other neurological conditions such as brain injury. They are known as neurological physiotherapists, or neuro physios.

Neuroplasticity

Although brain cells that have been severely damaged or have died can't grow back, the brain can re-wire itself, allowing you to relearn things like walking, speech and swallowing. This is called neuroplasticity. Neuroplasticity is the process that happens in the brain when you do rehabilitation therapy. By repeating the therapy activities, your brain starts to form new connections, allowing you to improve. To find out more visit stroke.org.uk/neuroplasticity.



1. Signals go from one cell to another, forming a connection in the brain.



2. When a stroke kills brain cells, it damages the connection.



3. Brain cells can sometimes form new connections, and start sending signals again.

How can a stroke affect my movement?

You may experience weakness, or even complete paralysis (called hemiplegia) in the muscles of one side of your body. This can make it difficult to move or use your limbs and get about. Your limbs may move in a different way when you try to use them. For example, your hip may move upwards when you want to step forwards, or your elbow may move out to the side when you want to lift something.

The affected side of your body may feel different. Your limbs may feel heavy because the weakness makes them difficult to move, or they may feel numb. Some people have more unusual sensations such as pins and needles, hot and cold sensations or feeling as though water is running down their limb. Occasionally these can be painful.

You may have problems with your posture and balance, making you more likely to trip or have a fall.

Joints on your affected side, such as your shoulder, may be vulnerable to injury, for example if your arm is pulled or its weight is allowed to 'drag'. This can cause a partial dislocation (called subluxation), or 'frozen shoulder', where your shoulder becomes painful and difficult to move without support. Shoulder pain (also known as hemiplegic shoulder pain), happens to around a third of all stroke survivors within six months of a stroke. Find out more in our guide to pain after stroke stroke.org.uk/pain.

Some muscles on the affected side may become stiff (most often at the wrist, fingers and the ankle) which can limit your movement at the joint, and some people may develop muscle spasms or a type of stiffness called spasticity. You can read more about these effects of stroke in our guides 'Physical effects of stroke' and 'Balance problems after stroke'.

What does physiotherapy involve?

When can physiotherapy begin?

From 24 hours after a stroke, if it's safe to do so, you will be encouraged to move around as much as you are able to. Depending on how your stroke has affected you, this may be on the bed, sitting in a chair, walking or continuing with your previous activities.

In the early stages, physiotherapy may focus on preventing complications and helping your recovery. Later, it can help you find ways to enable you to do things that are important to you, such as getting in and out of bed, or doing sports. You might use equipment or find different movement patterns to complete a task. A physiotherapist can also help you adapt an activity or task so you can do it more independently.

Where will it take place?

If you were admitted to hospital following your stroke, your physiotherapy will begin as an inpatient, most likely on a stroke ward. Once you are ready, you should progress to more active sessions. Facilities in hospitals vary, but these may happen in a rehabilitation area or physiotherapy gym.

You might be moved out of the stroke unit to a rehabilitation unit to continue your treatment. In some areas, a specialist community rehabilitation team will support you to continue your recovery at home. Other areas offer a transition period between hospital and home in an intermediate care centre.

You may also continue your physiotherapy as an outpatient, with therapy provided in person, or through online appointments. Online appointments can include individual advice from a therapist, or group activities.

An online appointment might take place via a video link, which you can join on a mobile phone, tablet or laptop. If you are offered a virtual appointment but are not sure how to access it, speak to the outpatients appointments team.

If you didn't have physiotherapy after your stroke, or your needs change after leaving hospital, you can still have physiotherapy. Ask your GP to refer you to a hospital stroke team or community rehabilitation team for help with any problems. You may also be able to refer yourself.

You can find out where local physiotherapy services are located in England via the NHS website **nhs.uk/service-search**.

Early Supported Discharge

Some people can have Early Supported Discharge, usually after a mild or moderate stroke. This means continuing your recovery and rehabilitation at home, supported by a team of stroke professionals. You should get the same amount of therapy as you would in hospital. This service typically lasts for up to six weeks.

You might go on to a community rehabilitation team if you need longer term support or are more disabled by your stroke. If you are able to travel, you might have physiotherapy appointments in the outpatient department of your local hospital.

Care soon after a stroke

Good care in the early days is important to help prevent joint stiffness, muscle tightness and pain. A therapist will advise on how to reduce the risk of complications and to move around if your mobility is limited. For example, how to roll over or to get in and out of bed. They can advise on when and how you can get up and about and if any equipment such as a walking stick might help you.

If you have one-sided paralysis, correct positioning is important to prevent spasm or injury. If you are unable to move, you will need a special mattress and the nurses may need to help you change position at regular intervals (usually every two hours) to prevent damage to your skin.

If you are unable to move, you may be given chest physiotherapy to keep your lungs clear. If possible, you will be helped to sit in a chair, as this will help avoid blood clots in your legs, improve your breathing, strengthen the muscles around your middle, and help your recovery.

Fatigue

Fatigue and tiredness are common after stroke. This can affect how much activity you are able to do, including how long you can sit in a chair or walk around, and how long you can stay awake. To help manage fatigue, you need to plan rest as well as activity into your daily rehabilitation routine. For more information and practical tips on managing fatigue visit **stroke.org.uk/fatigue**.

Your hopes and plans

Your therapist will work with you to set goals, or priorities for things you want to be able to do. Larger goals such as walking may be broken down into smaller steps, starting with sitting and standing independently. This gives you shorter-term targets to work towards with your rehabilitation team. Your goals will depend on how your stroke has affected you as well as your abilities and interests before the stroke. Your treatment is focused on the things that are important to you.

Moving again

The more therapy you have and the more active you are after a stroke, the better. Guidelines recommend that you should receive at least 45 minutes of each type of therapy you need per day for as long as you need it.

Depending on how much you are able to do, this may include moving around your bed, then from bed to chair. It can also include standing balance and walking with and without support. For many people this is a gradual process, and it is important to get each step right so that you are safe and regain your confidence.

Moving helps your balance, aids breathing and skin care, and reduces the risk of blood clots in your legs. The physiotherapist will advise on the best type of seating and positioning for you. They can show you how to use cushions for support, particularly for a weak arm.

If you can't stand, the physiotherapist and nurses may use equipment such as a hoist to help you get onto your feet, if it is safe. Physiotherapists may also use other equipment and their physical skills to help you stand with them. This will give you the opportunity to support your own weight and encourage the muscles of your trunk, hips and legs to work. Your therapist may not encourage you to walk straight away if you need time to recover your strength and stamina.

Exercises

During physiotherapy you may do exercises to strengthen weak muscles and build up your stability and stamina. Stretching exercises can reduce muscle and joint stiffness. You may also work on specific skills that you need to improve. For example, if you are having difficulty keeping your balance, you may be asked to stand up a lot.

If you have difficulty lifting your arm, you will need to do activities that make you lift and use your arm. If you are having difficulty walking you need to walk as much as possible.

There are many ways to exercise and practise. You may work on a one-to-one basis with a physiotherapist, particularly on the tasks and the movements you are learning to do. You may also work with a physiotherapy assistant, or in a group.

It is important to practice exercises or activities on your own, outside of physiotherapy sessions.

You will be given exercises by your physiotherapist that you can do either independently, or with support from ward staff, as well as your family or visitors. You will be supported with written instructions, diagrams or instructions recorded on your phone.

Equipment

Although most people regain the ability to walk, some do not, and others are only able to walk short distances with support. If this is the case for you, your physiotherapist and occupational therapist will provide walking aids such as a stick or ankle splint and, if necessary, a wheelchair and teach you and your family or carers how to use them.

After an assessment, they will also arrange for any other equipment you may need such as a hoist to help you get in and out of a chair or bed. You may need adaptations to the house when you go home, such as a ramp or wider doors. For more information see our guides 'Equipment for independent living and mobility' and 'Accommodation after stroke'.

How can my family or carer help?

In most cases, if you wish, it's possible for members of your family, friends or carers to attend rehabilitation sessions with you. If you need help with daily tasks such as getting in and out of bed or using the stairs, your physiotherapist can teach your family or carer how to help, and how to use any equipment you need.

Staying active after a stroke

When you get home, try to keep as active as you can. Moving and being active can help your recovery, reduce your risk of another stroke, and improve your wellbeing. Your physiotherapist can advise you on ways to build up activity levels and overall health.

Some areas offer an 'exercise referral scheme' or specialist rehabilitation groups. Ask your GP or physiotherapist what is available near you.

For ideas about moving more and staying active after a stroke, read our guide 'Getting active after a stroke' at stroke.org.uk/getting-active.

When will my therapy end?

The fastest recovery takes place in the first weeks and months after a stroke. But we know that improvements can and do carry on for years.

You can help your recovery by practising exercises, staying active and using the skills you have re-learned. Improvements can be due in part to you becoming fitter and stronger as time passes, but they are also due to the brain rewiring itself. See 'Neuroplasticity' above.

When you start physiotherapy, you set goals and plan exercises with the therapist. Therapy should finish when you reach your goals, such as walking or improving your balance. It can also end if the therapist assesses that further therapy wouldn't benefit you, because the therapy isn't helping you make progress. You should have therapy for as long as you need it, but this is not always the case in all areas of the UK.

At any time, if new problems arise or old ones return, you can ask your GP to refer you to a physiotherapist. In some areas they offer a 'direct referral' system, where you can contact the team or department directly to make an appointment without having to go through your doctor. If you find it hard to get the support you need, call our Helpline for advice and information.

Private therapy

You may wish to consult a private physiotherapist if you feel you could benefit from further therapy, provided you're not having the same treatment from an NHS therapist. Let your NHS therapist know you are seeing a private therapist, both as a courtesy and to ensure you continue your treatment and goals.

Check that the private therapist has substantial experience of stroke rehabilitation and the appropriate qualifications. Look for the initials MCSP (Member of the Chartered Society of Physiotherapy) and SRP (State Registered Physiotherapist) after their name. Check that you understand their fee structure, how many sessions are likely to be involved and whether you can be treated at home. For further information, see our guide 'Private treatment'.

Where to get help and information

From the Stroke Association

Helpline

Our Helpline offers information and support for anyone affected by stroke, including family, friends and carers.

Call us on **0303 3033 100**, from a textphone **18001 0303 3033 100** Email **helpline@stroke.org.uk**.

Read our information

Get more information about stroke online at **stroke.org.uk**, or call the Helpline to ask for printed copies of our guides.

My Stroke Guide

The Stroke Association's online tool My Stroke Guide gives you free access to trusted advice, information and support 24/7. My Stroke Guide connects you to our online community, to find out how others manage their recovery.

Log on to mystrokeguide.com today.

Other sources of help and information

Chartered Society of Physiotherapy

Website: csp.org.uk

Has a register of therapists who are members of the Association of Chartered Physiotherapists interested in Neurology (ACPIN).

Physio First

Website: physiofirst.org.uk

Tel: **01640 684 960**

Email: minerva@physiofirst.org.uk
Has an online database of qualified
physiotherapists, which can be searched by
location and specialism.

Your notes

About our information

We want to provide the best information for people affected by stroke. That's why we ask stroke survivors and their families, as well as medical experts, to help us put our publications together.

How did we do?

To tell us what you think of this guide, or to request a list of the sources we used to create it, email us at feedback@stroke.org.uk.

Accessible formats

Visit our website if you need this information in audio, large print or braille.

Always get individual advice

This guide contains general information about stroke. But if you have a problem, you should get individual advice from a professional such as a GP or pharmacist. Our Helpline can also help you find support. We work very hard to give you the latest facts, but some things change. We don't control the information provided by other organisations or websites.

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Every five minutes, stroke destroys lives. We need your support to help rebuild them. Donate or find out more at **stroke.org.uk**.

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