

Hand and wrist pain

arthritis-uk.org



We are Arthritis UK

We're the 10 million adults, young people and children living with arthritis. We're the carers, researchers and healthcare professionals. The families and the friends. All united by one powerful vision: a future free from arthritis. So that one day, no one will have to live with the physical, emotional and practical challenges that arthritis brings.

There are many different types of arthritis. And we understand that every day is different. What's more, what works for one person may not help another. That's why our trusted information blends the latest research and expert advice with a range of lived experiences. In this way, we aim to give you everything you need to know about your condition, the treatments available and the many options you can try, so that you can make better-informed choices to suit your needs.

We're always happy to hear from you whether it's with feedback on our information, to share your story, or just to find out more about the work of Arthritis UK. **Contact us at healthinfo@arthritis-uk.org**

Contents

What should I know about hand and wrist pain?	4
How do hands and wrists work?	5
What can I do to help myself if I have hand and wrist pain?	6
When should I see a healthcare professional?	9
How are hand and wrist conditions diagnosed?	11
Specific hand and wrist conditions	12
Working with hand and wrist pain	22
Research and new developments	23
Glossary	24
Exercises for hand and wrist pain	26
Discover our support services	29
Thank you	30
Support our work	31

What should I know about hand and wrist pain?

Most cases of hand and wrist pain will not be a sign of a serious or long-term problem and will settle in a few days or weeks with some simple self-care you can do at home.

There are several conditions that can cause pain or other symptoms in the hands and wrists. There are types of arthritis that can affect the hands and wrists.



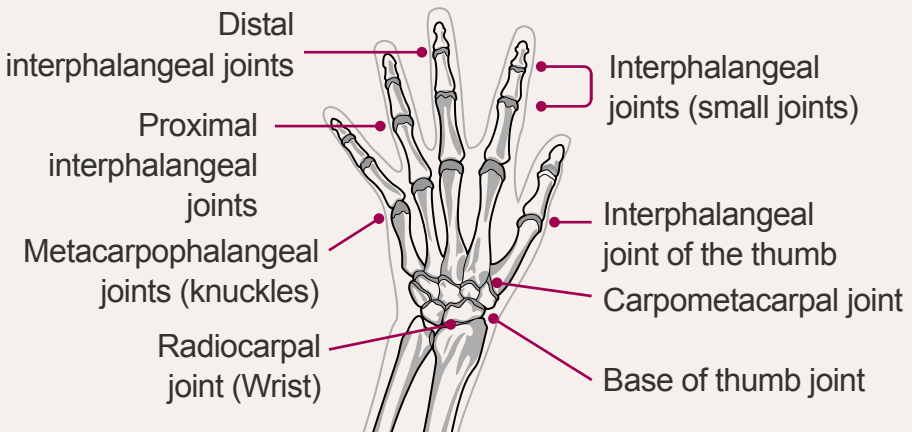
How do hands and wrists work?

There are 27 small bones that make up each hand and wrist. Eight of those bones are in your wrist. Each finger has three bones, and the thumb has two. There are five bones in the palm of your hand, connecting each finger and the thumb with the wrist.

There are more than 30 muscles that control the hand and wrist. These are in your hands, wrists and forearms.

Muscles are attached to bones by tendons. These are small but very tough pieces of connective tissue. Tendons pass through a bony passage in your wrist, known as the carpal tunnel. The median nerve also passes through this tunnel.

Figure 1. Joints of the hand and wrist



What can I do to help myself if I have hand and wrist pain?

As long as you're not in severe pain, and you don't have any other symptoms that suggest you need medical attention, there are some simple steps you can take to ease most cases of hand and wrist pain.

Avoid tasks that make the pain worse

Try to avoid tasks that are causing the pain or making it worse. This may be anything that has a repetitive nature, such as using a screwdriver, painting or lifting heavy objects. You might be able to change the way you do some tasks to take the strain off your hands and wrists. Some conditions affecting the hand and wrist won't get better until you stop doing certain tasks.

Drugs to reduce pain

These include painkillers such as paracetamol and non-steroidal anti-inflammatory drugs (NSAIDs), like ibuprofen. There are NSAID gels you can rub into your hand and wrist. Or, there are tablets you can swallow. Be careful not to take too much by combining gels and tablets, as both get into your blood stream. With any medication you should always read the information that comes with it, particularly about dosages. If you have any questions or concerns talk to a GP or pharmacist.



Ice and heat

Putting an ice pack on your hands and wrists can reduce swelling and ease pain. You could use a packet of frozen peas wrapped in a damp towel. Never put ice directly on your skin, as this can burn or irritate it. You can apply ice for up to 20 minutes several times a day.

If your hands are painful and stiff, applying heat could help. There are products such as wheat bags you can buy from chemists that you heat in a microwave. You might need to place a cloth or tea towel on your skin to avoid burning it. Putting your hand and wrist on a hot water bottle with the cover on, or having a warm bath or shower may also provide some relief. Moving your hand around in a bowl of warm water can be helpful and soothing. Don't apply heat to your hand or wrist if it's swollen or if you've just injured it, as this can make it worse.

Wax baths are another form of heat therapy that can relieve pain and stiffness. To get the most benefit it's a good idea to use one before you exercise your hands. Ask your GP, a pharmacist or a hand therapist where you can buy one, and for advice on how to use them. Follow the instructions carefully, and make sure you don't overheat the wax. You shouldn't use these if you have cuts or open sores.

Switching between heat and ice therapy throughout the day may help. Ice reduces blood flow, which can help with pain and swelling. Heat increases blood flow, which can help if your hands are stiff and the muscles are tired. Heat can also help damaged soft tissue to heal.

Wearing splints

Wearing splints can provide support to the hand and wrist. Some can be used when you're carrying out everyday activities and some are for when you're sleeping and resting. A hand therapist, physiotherapist or occupational therapist can give you advice on whether a splint could help, which type would be good for you and how to use it properly.

Keep moving your hands and wrists

Moving your hands, wrists and fingers as much as possible can help ease pain and stiffness. This will also maintain range of movement, function and strength.

At the back of this booklet are some exercises you can do at home. Try to do them as regularly as you can, especially if your hands and wrists are feeling stiff.

If you have carpal tunnel syndrome, talk to a physiotherapist, GP or hand therapist for specific advice on exercise.

When should I see a healthcare professional?

Hand and wrist pain often gets better with things you can do at home.

However, you'll need to visit your GP surgery if:

- your pain isn't getting better after treatment at home for two weeks
- the pain is getting worse
- the pain keeps returning
- the pain is stopping you from doing your everyday activities
- your hands are stiff and swollen, particularly in the mornings and these feelings don't get better after half an hour
- as well as being swollen and stiff, your hands are warm and red
- you also feel generally unwell, especially if you have a high temperature
- you have ongoing tingling, numbness or weakness in the hands or fingers.

It's important to get urgent medical attention, if:

- you think you've broken a bone
- you have extreme pain
- any part of your hand, wrist or fingers is a funny shape or colour
- you have lost the feeling of part or all of your hand
- there was a snap, grinding or popping noise when you injured your hand or wrist
- you can't move your hand, wrist or fingers properly.

If you have ongoing hand and wrist pain or a specific condition affecting the hand and wrist it could be helpful to see a hand therapist. These are healthcare professionals with expertise in treating conditions affecting the hand and wrist. Your GP, rheumatology department or orthopaedic department could refer you to one.

Occupational therapists are trained healthcare professionals who can help if you're having difficulties with everyday tasks. They can help you find other way of doing activities. You can be referred to one through your GP, or you might be able to see one through Social Services, depending on your situation. Your workplace might have access to occupational therapy, or you could have private treatment. You can find one by visiting the Royal College of Occupational Therapists' website: rcot.co.uk/learn-about-occupational-therapy/what-occupational-therapy/find-occupational-therapist





How are hand and wrist conditions diagnosed?

To diagnose a problem with your hand and wrist a doctor or possibly a specialised physiotherapist will want to hear about what symptoms you've had and how long you've had them. They will examine your hand and wrist, and may check range of movement, feeling and strength.

You might be asked to have blood tests to look for inflammation.

X-rays, ultrasound scans, computerised tomography (CT) scans and magnetic resonance imaging (MRI) scans are sometimes used to help doctors have a closer look at what's happening inside your hand and wrist.

Sometimes people might need a **nerve conduction study**, which check how well your nerves are working.

Specific hand and wrist conditions

There are a number of conditions that can affect the hand and wrist.

Carpal tunnel syndrome

Carpal tunnel syndrome occurs when there's pressure on the median nerve as it passes through the carpal tunnel.

This can cause tingling, numbness and pain, mainly in your hand and fingers. It can also cause similar symptoms in the wrist and forearm. Often the symptoms are worse at night.

If you think you have carpal tunnel syndrome, you should get an appointment at your GP surgery.

There are several potential causes of carpal tunnel syndrome, but often it's not possible to say exactly what's causing it.

It can affect pregnant women. Being overweight can also make people more likely to get carpal tunnel syndrome. Losing weight if you need to can help relieve symptoms.

There are some other medical conditions that can make carpal tunnel syndrome more likely, such as **diabetes**, an **underactive thyroid** and **arthritis** in the wrist.

People who use hand-held vibrating tools as part of their job can be at risk of carpal tunnel syndrome.

Carpal tunnel syndrome can go away in a few weeks or months. Using a splint or having a steroid injection can help.

If symptoms don't go away, a minor operation to relieve the pressure in the carpal tunnel can solve the problem.

De Quervain's tendinopathy

Problems can develop with tendons in the hand and wrist.

Tendons have a protective covering, or sheath, with synovial fluid in. This thick fluid protects the tendon and allows it to move easier.

Sometimes tendons or tendon sheaths can become inflamed. This can cause pain, swelling and stiffness and is called tendinopathy.

It can happen if tendons are overused, for example after playing a lot of sport.

Arthritis can lead to tendinopathy, and in rare cases so can an infection. Sometimes, there might not be an apparent cause.

De Quervain's (Dey kwer-veins) tendinopathy is a common condition that can affect tendons in the wrist, causing pain around the wrist and at the base of the thumb. Pain normally eases with rest and can get worse with activity.

Applying ice wrapped in a damp towel and taking an NSAID can help. If your condition is not improving and is affecting your quality of life, steroid injections, splints, hand therapy or surgery might also be helpful.

Trigger finger

Trigger finger is the name of a condition in which you can't straighten a finger or thumb properly. You might even need to use your other hand to straighten it. Very occasionally, a finger may become too painful to straighten and may stay stuck in the same position.

Trigger finger most commonly affects the thumb, ring and middle finger. More than one finger can be affected at the same time.

The affected finger might swell, and it can be painful.

There can be a clicking or popping sensation that comes from the finger, especially in the morning.

It's thought to be caused by swelling of a tendon or tendon sheath.

Sometimes the swelling can cause nodules to form. These are small lumps that form under the skin.

Trigger finger can happen to otherwise healthy people for no clear reason. It's more common among women over the age of 40.

It's more likely if you've had a previous injury to the palm of the hand. Other medical conditions such as diabetes, gout, rheumatoid arthritis and an underactive thyroid may also increase someone's risk of getting it.

Trigger finger can get better without the need for treatment. You may need to avoid certain activities if it's thought they're making your symptoms worse. NSAIDs, like ibuprofen can help.

If it doesn't get better on its own and it isn't treated, it's possible for an affected thumb or finger to become permanently bent. Treatment can involve steroid injections. In most cases this will sort out the problem.

In some cases, a small operation can be carried out to stop the tendon from catching.



Dupuytren's contracture

Dupuytren's (due-per-trens) contracture can cause the fingers to bend in towards the palm of the hand.

It's caused by tissues in the palms of the hands gradually thickening, which then pulls the fingers towards the palm.

This condition is often mild and might not need specific treatment. It's more common in men in their middle age. Some heavy, repetitive tasks, such as those that are performed in mining, are thought to increase the risk of Dupuytren's.

It normally affects the middle, ring and little finger.

It's not often painful, but it can make it difficult to straighten out fingers and use your hands properly.

It may affect just one hand, but often affects both hands.

Treatment is only needed if fingers have started to bend, or if you can't use your hand properly.

Treatment options available in the earlier stages, include injections of a medicine called collagenase (collagen-ase). This can break down the thickened tissues. This is a quick and easy treatment that doesn't need to be done as an operation. You will need to have your fingers straightened and stretched afterwards by a healthcare professional, which might be a bit uncomfortable.

There are surgical options including cutting the thickened tissue or cutting it out. This can be done as an operation or using a needle in an outpatient clinic.

Talk to your doctor to discuss your options if your symptoms aren't improving.



Osteoarthritis

Osteoarthritis is the most common type of arthritis. It can affect hands and wrists, particularly the joints at the ends of the fingers or at the base of the thumb.

It can cause pain and stiffness, and make it difficult to use your hands and wrists properly.

Osteoarthritis can cause bony lumps to develop on the hands, particularly on the fingers.

If possible, it can help to avoid tasks that make the pain worse and put strain on your hands and wrists.

Keeping your hands and wrists moving as much as possible can help ease symptoms. There are some examples of simple exercises you could do at the back of the booklet. Try to do these every day.

Taking painkillers, such as paracetamol, or NSAIDs such as ibuprofen can help ease pain and help you to keep moving your hands.

Capsaicin cream, which is made from extracts from chili plants, has helped some people with osteoarthritis of the hand. It can help block pain messages sent to nerves.

In some cases, if symptoms don't improve then surgery might be an option. Finger joints can be fused. This can improve symptoms, but it will lead to a loss of movement.

It's also possible to have joint replacements for hand osteoarthritis. Another option could be arthroscopy, also known as key-hole surgery, to clean out a joint using a small cut, rather than open surgery

Rheumatoid arthritis

Rheumatoid arthritis is an autoimmune condition that can cause inflammation in joints.

This condition can sometimes start in the hands and wrists, with symptoms of pain, swelling and stiffness. This is often worse first thing in the morning. The stiffness can last for longer than half an hour and tends not to ease with movement. Joints can feel warm, and they can sometimes be red.

Rheumatoid arthritis can affect both hands and wrists in the same way at the same time. The symptoms can start quite gradually.

This is an uncommon condition in the general population. But if you do get any of these symptoms in your hands, especially if you also have an overall feeling of being unwell and very tired, see a doctor as soon as you can.

There are drugs that can treat the underlying cause of rheumatoid arthritis, and these can help prevent damage to your joints. The earlier treatment is started, the more effective it's likely to be.



Hand-arm vibration syndrome

A condition called hand-arm vibration syndrome can affect people who have regularly used vibrating tools and machinery over a period of around 10 years or more. Such tools include pneumatic drills, power drills and chainsaws.

The early symptoms are loss of feeling, numbness and pins and needles in the fingers. Symptoms can often be mild, and just affect the ends of the fingers.

It might cause whole fingers to go numb. For some people this can make tasks such as doing up buttons and picking up small objects like coins difficult.

It's thought that it could be caused by repeated minor injuries to the small nerves and blood vessels in the fingers.

Hand-arm vibration syndrome can lead to another condition called Raynaud's phenomenon. See below.

If you think you have symptoms of hand-arm vibration see a doctor and report it to your manager if you think it's being caused by something you do at work.

You might need to stop using vibrating tools and machinery to stop your condition getting worse.



Raynaud's phenomenon

Raynaud's phenomenon is a condition that causes a reduction in blood supply to the outer parts of the body, including the fingers.

It can happen in the cold or in stressful situations. It can also occur as a result of using hand-held vibrating tools.

During an attack of Raynaud's, the fingers can change colour. They may first go white or look waxy. They can then go blue, and possibly even purple or black in severe cases. They are then likely to go red, and can be painful, tingly and numb when the blood rushes back.

In most cases the cause is unknown, and Raynaud's occurs on its own. This is known as primary Raynaud's.

People with the medical conditions **lupus** or **scleroderma** can develop Raynaud's as a complication. This is known as secondary Raynaud's. Sometimes secondary Raynaud's can start before the other medical condition – though this is rare.

Primary Raynaud's is usually not serious, and the symptoms are manageable.

Secondary Raynaud's can cause ulcers and sores that need treating.

Keeping warm in cold weather can help reduce the chances of an attack of Raynaud's. Wearing several layers of clothing, as well as a hat, scarf and gloves will help. Reusable or disposable hand warmers and heated gloves can help.

It's good to keep the skin of your fingers as healthy as possible by using a moisturiser at least once or twice a day. Your pharmacist will be able to tell you which ones are good for people with Raynaud's.

Exercising regularly is also good for your circulation.

Smoking is very bad for your circulation and can make Raynaud's much worse. If you smoke, quitting can be the best thing you do. Your GP will be able to offer advice and support, and there's useful information at **nhs.uk/better-health/quit-smoking**

There are drugs available, such as nifedipine, which can improve your blood flow. These will need to be prescribed by a doctor.



Working with hand and wrist pain

If you've had time off work, getting back sooner rather than later is helpful for most people. It's better to get back to your normal routine as much as possible, and as soon as possible. You may need to take some painkillers to allow you to do so.

If there are tasks that make your pain worse, try to do them slightly different to take the strain off your hands and wrists. Could you avoid doing these activities for at least a short while? Could you get help with them?

You might find it easier to do reduced hours, or rotate some of your tasks at work, at least for a time if that's possible.

Talk to your manager or HR department for support if you're struggling with any aspect of your job.

If you have an occupational health adviser at your workplace, they can help advise what work you are fit to do and arrange any simple adjustments to help you. If you're having difficulties travelling to or from work or need an item of equipment, the Government's Access to Work Scheme might be able to help. You can find out more at: **[gov.uk/access-to-work](https://www.gov.uk/access-to-work)**

If you're unable to get back to work after two weeks of absence, you should talk to your doctor and employer about getting physiotherapy, occupational therapy, hand therapy or other treatments that can get you moving again.

Research and new developments

Research is helping to both increase our understanding of how hand and wrist pain develops in conditions such as arthritis and carpal tunnel syndrome, as well as develop new treatments and improve those currently available.

Our previous research has:

- found that a corticosteroid injection is more effective at reducing carpal tunnel syndrome symptoms than night splints over six weeks
- validated tests that reliably measure symptoms of Raynaud's phenomenon during clinical trials to allow for better assessment of new treatments
- adapted an assessment of hand performance in people with rheumatoid arthritis for use in the UK.

We've also funded research into several aspects of hand and wrist pain, including:

- development of new, well designed wrist splints to ensure a more comfortable fit, including the development of computer software and 3D printing for custom made splints
- investigating factors that impact on hand and wrist pain, including gender and lifestyle
- investigating the effectiveness of thumb splints for people with thumb base osteoarthritis
- looking at what causes tissue thickening in Dupuytren's contracture, to allow for the development of new treatments
- development of new surgical techniques for tendon repair, to allow for a full and quick recovery.

Glossary

Arthritis is a common condition that affects joints. There are many different types of arthritis, affecting people of all ages.

A **computerised tomography scan**, sometimes called a CT or CAT scan, is used by radiographers to take a detailed picture of all the structures inside a part of the body – such as bones, blood vessels and organs.

Diabetes is a long-term medical condition that makes your blood sugar level too high. There are two types: Type 1 diabetes – where the immune system attacks and destroys the insulin your body needs to turn sugar from food into the glucose it needs for energy. Type 2 – where your body stops producing enough insulin or doesn't use it properly to change sugar to glucose. If either condition goes untreated the high levels of unused sugar in your blood can cause a wide variety of problems.

Lupus is a condition where the body's immune system attacks healthy cells instead of infections. Lupus can affect the skin, hair and joints, and can sometimes affect the internal organs, such as the heart or kidneys.

A **magnetic resonance imaging (MRI) scan** is done in a large tube that contains powerful magnets. It uses magnetic fields to create detailed images of the body.

Nerve conduction studies show how well and how fast nerves send electrical impulses around the body. They can help diagnose some conditions and show how serious they are.

Scleroderma is a condition that causes hard, thickened areas of skin on the body. It might also cause problems in your internal organs and blood vessels.

An **ultrasound scan** uses sound waves to create images of the inside of the body.

An **underactive thyroid** doesn't produce enough hormones. It's also known as hypothyroidism. The thyroid is a gland in the neck that produces important hormones. Not having enough of these hormones can cause symptoms including tiredness, being sensitive to the cold, weight gain, depression and muscle aches.

An **x-ray** is a test that creates images of the inside of the body. It's used to look for injury or damage to the bones or joints.

Exercises for hand and wrist pain

The following exercises are designed to keep the hand and wrist flexible.

It's important to work within your pain limits and not to overstretch yourself if you're in pain. A little bit of pain or discomfort while you're exercising that you can cope with doesn't mean you're doing yourself any harm. Remember it's best to keep moving as much as you can, as otherwise your symptoms could get worse.

Try to do these exercises regularly, every day if you can. Start off gently and then gradually increase the amount you do.

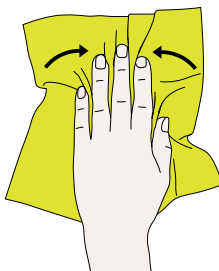
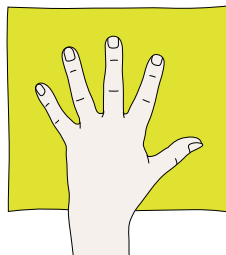
You should stop and seek advice if you have severe pain during or after exercise, or if the pain doesn't go away after a few days.

Finger strengthening

Begin with the palm of your hand on a tissue or towel on a table, fingers apart.

Pull your fingers together by pressing your hand down into the table and bunching up the towel between your fingers. Repeat.

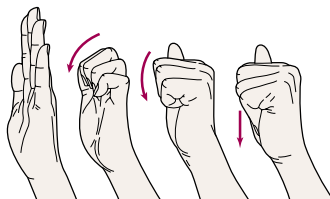
You can also do this without using a towel or tissue, and simply by pressing down on the table and squeezing your fingers together and then stretching them apart.



Finger stretching

Start with the fingers extended straight out.

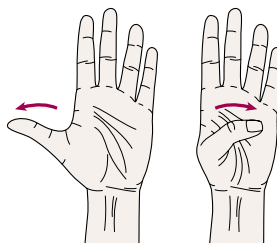
- Make a hook fist; return to a straight hand.
- Make a full fist; return to a straight hand.
- Make a straight fist; return to a straight hand.



Thumb stretch

Hold your hand out in front of you, as if you're saying stop. Begin with your thumb positioned outward.

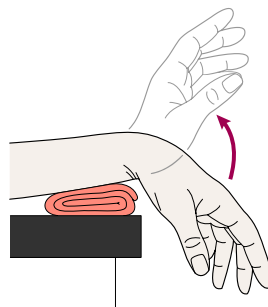
Move the thumb across your palm and then back to the starting position.



Hand lift

Place your forearm on a flat surface, like a table, with your hand hanging over the edge, palm facing down. A rolled-up towel under your wrist might provide comfort.

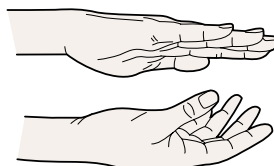
Keeping your fingers relaxed, move your hand upward until you feel a gentle stretch, then return to the starting position.



Wrist twist

Bend your elbow to 90 degrees with your palm facing down.

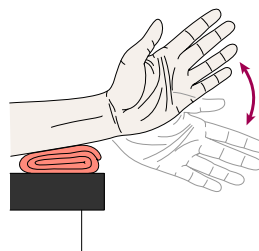
Rotate your forearm, so that your palm faces up and then down. You can stand or sit to do this.



Hand wave

Support your forearm on a table on a rolled-up towel for padding or on your knee, thumb facing upward.

Move the wrist up and down through its full range of motion, as if you are waving.



Notes

Discover our support services

You don't need to face arthritis alone. Get the information, advice and support that you need.



Call our free helpline:
0800 5200 520



Connect with our online community, go to:
community.arthritis-uk.org



Chat with AVA, our online assistant, go to:
arthritis-uk.org/ask-AVA-our-virtual-assistant



Track your symptoms with our easy app, go to:
arthritis-uk.org/track-my-arthritis-symptoms-app

Thank you!

A team of people helped us create this booklet. We would like to thank:

Professor Karen Walker-Bone

Dr Craig Sheridan

Lisa Newington

Professor Grey Giddins

We would also like to give a special thank you to the people who shared their opinions and thoughts on the booklet. Your contributions make sure the information we provide is relevant and suitable for everyone.



Support our work

At Arthritis UK we rely on donations to fund our work. Help support people with arthritis and fund life-changing research by making a donation today. Every contribution makes a difference.

arthritis-uk.org



Tell us what you think

We occasionally ask for feedback to help us improve our health information.

If you're interested in joining our community of reviewers, please scan the QR code.



Join our community

Sign up today and we'll be in touch by email a few times a month with the latest arthritis news, including research and campaign updates, as well as tips and advice about how to live well with arthritis, and ways you can get involved.

arthritis-uk.org/signup

Search 'Arthritis UK' on Facebook, Instagram, X, TikTok and YouTube



Registered with
**FUNDRAISING
REGULATOR**

Arthritis UK Registered Charity England and
Wales No. 207711, Scotland No. SC041156.

X2293

 **Arthritis**UK