

Information sources and further reading

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Information sheet 1: What is arthritis?

Arthritis is defined as an acute or chronic joint inflammation. Symptoms can include pain, swelling, stiffness, and redness which may contribute to reduced function and dexterity. Arthritis isn't a single condition; there are many different types.

It can affect people of all ages and physical fitness – including children, teenagers, and athletes. Some forms of arthritis are more common in older people.

Whatever specific type of arthritis you have, remaining physically active and choosing healthy lifestyle behaviours will help you stay mobile and able to participate in activities that are meaningful to you.

Arthritis can make life difficult by reducing mobility and making everyday activities harder to do. It can affect people's ability to work and participate in social and leisure activities. Arthritis is commonly associated with depression or anxiety.

The symptoms of arthritis can vary from week to week, and even from day to day. However, with the right treatment and approach you can manage your symptoms and live well.

Physiopedia. [Arthritis](#)

Versus Arthritis. [Arthritis](#)

Arthritis Foundation. [Treating Depression and Anxiety in Arthritis](#)

Arthritis Foundation. [Arthritis and Mental Health](#)

Types of arthritis

There are many different types of arthritis. Some of the most common include:

- **osteoarthritis**
- **rheumatoid arthritis**
- **spondyloarthritis (including axial spondyloarthritis and psoriatic arthritis)**
- **gout**
- **juvenile idiopathic arthritis (JIA)**

NHS. [Arthritis](#)

Physiopedia. [Arthritis](#)

Versus Arthritis. [Arthritis](#)

Symptoms of arthritis

Arthritis affects people in different ways and each condition will have specific symptoms. However, some common joint symptoms are:

- joint pain
- stiffness (particularly early morning)
- inflammation (swelling)
- warm or red skin over the affected joint
- weakness and loss of muscle mass

Certain types of arthritis can have symptoms not directly related to your joints:

- widespread pain
- extreme fatigue
- scaly, itchy skin (psoriasis)
- changes to finger or toe nails
- rashes
- fever
- weight loss
- symptoms that affect other body systems, including eyes, heart, lungs and nerves

NHS. [Arthritis](#)

Physiopedia. [Arthritis](#)

Versus Arthritis. [Joint care](#)

Arthritis Foundation. [Arthritis and Mental Health](#)

How physiotherapy can help

It's important to stay active and keep moving when you have arthritis. Physiotherapists are part of a multidisciplinary team that can help you manage your arthritis. They will be able to assess your condition and abilities and guide you on how to keep active and help manage your symptoms. A physiotherapist can work with you and your other health care providers to co-develop a tailored management plan to help you get back to what's important to you.

Strategies might include:

- devising an exercise programme tailored to your needs
- building your strength, stamina, mobility, and activity levels
- helping you find the balance between rest and activity
- helping you identify helpful lifestyle choices
- supporting you to develop skills to manage pain, swelling, and stiffness
- helping you modify activities at work and home
- assess you holistically and help you access care from other professionals, such as medical specialists, psychologists, occupational therapists and others

Versus Arthritis. [Physiotherapy](#)

National Institute for Health and Care Excellence (NICE). [Rheumatoid arthritis in adults: management - Non-pharmacological management](#). Last updated October 2020.

Information sheet 2: Rheumatoid arthritis

Rheumatoid arthritis (RA) is a type of inflammatory arthritis and one of the most common. It is an autoimmune disease that most commonly affects the joints of the hands, wrists, shoulders, elbows, knees, ankles and feet.

It can affect adults of any age, but most commonly starts among people between the ages of 40 and 60. It's more common in women than men.

Wilfred F Peter, PhD and others, [Clinical Practice Guideline for Physical Therapist Management of People With Rheumatoid Arthritis](#), Physical Therapy, Volume 101, Issue 8, August 2021, pzab127

painHEALTH. Government of Western Australia, Department of Health. [Rheumatoid arthritis](#)

Versus Arthritis. [Rheumatoid arthritis](#)

Symptoms of RA

There are a number of symptoms that may suggest RA, these vary from person to person. The most common include:

- **swollen and painful joints for more than 6 weeks**
- **swelling and stiffness in joints in the morning (lasting more than 30 minutes)**
- **severe tiredness (fatigue)**
- **a general feeling of being unwell and possible loss of weight**
- **loss of stamina**
- **loss of muscle bulk**
- **reduced ability to do daily activities, eg at work, home, and leisure**
- **skin lumps (nodules), eye dryness or redness.**

Jonathan Kay, Katherine S. Upchurch, [ACR/EULAR 2010 rheumatoid arthritis classification criteria](#), [Rheumatology](#), Volume 51, Issue suppl_6, December 2012, Pages vi5–vi9

Versus Arthritis. [Rheumatoid arthritis](#)

painHEALTH. Government of Western Australia, Department of Health. [Rheumatoid arthritis](#)

NHS. [Arthritis](#)

National Rheumatoid Arthritis Society (NRAS). [Making a diagnosis of rheumatoid arthritis](#)

Cardiovascular disease and RA

People with RA and other inflammatory joint disorders have an increased risk of cardiovascular disease (CVD).

Agca R, Heslinga SC, Rollefstad S, Heslinga M, McInnes IB, Peters MJ, Kvien TK, Dougados M, Radner H, Atzeni F, Primdahl J, Södergren A, Wallberg Jonsson S, van Rompay J, Zabalan C, Pedersen TR, Jacobsson L, de Vlam K, Gonzalez-Gay MA, Semb AG, Kitis GD, Smulders YM, Szekanecz Z, Sattar N, Symmons DP, Nurmohamed MT. [EULAR recommendations for cardiovascular disease risk management in patients with rheumatoid arthritis and other forms of inflammatory joint disorders](#): 2015/2016 update. *Ann Rheum Dis*. 2017 Jan;76(1):17-28. doi: 10.1136/annrheumdis-2016-209775. Epub 2016 Oct 3. PMID: 27697765

People with RA experience a 1.5- to 2-fold increased risk of coronary artery disease and twice the risk of developing heart failure compared with the general population.

Kanishk Jain and others, [Long-term outcomes in Rheumatoid Arthritis: Review of data from the 'Basildon Inflammatory Arthritis Cohort'](#), *Rheumatology Advances in Practice*, Volume 6, Issue 3, 2022, rkac075

Healthy lifestyle choices, including regular physical activity, are important in the management of RA to reduce the risk of CVD.

Bearne, Lindsay M., and Christina H. Opava, [Physical activity and exercise](#), in David L. Scott and others (eds), Oxford Textbook of Rheumatoid Arthritis (Oxford, 2020; online edn, Oxford Academic, 1 Sept. 2020), accessed 27 June 2023.

Lindsay M Bearne, [Physical activity in rheumatoid arthritis—is it time to push the pace of change?](#) Rheumatology Advances in Practice, Volume 7, Issue 1, 2023, rkac107.

Metsios GS, Moe RH, van der Esch M, van Zanten JJCSV, Fenton SAM, Koutedakis Y, Vitalis P, Kennedy N, Brodin N, Bostrom C, Swinnen TW, Tzika K, Niedermann K, Nikiphorou E, Fragoulis GE, Vlieland TPVM, Van den Ende CHM, Kitas GD; IMPACT-RMD Consortium. [The effects of exercise on cardiovascular disease risk factors and cardiovascular physiology in rheumatoid arthritis](#). Rheumatol Int. 2020 Mar;40(3):347-357. doi: 10.1007/s00296-019-04483-6. Epub 2019 Dec 4. PMID: 31802210

Nicola Cornwall and others, [Implementation of physical activity interventions for people with inflammatory arthritis: an overview and future recommendations](#), *Rheumatology Advances in Practice*, Volume 7, Issue 1, 2023, rkac094

Mayo Clinic. [Rheumatoid arthritis: Is exercise important?](#)

Physical activity and exercise

Physical inactivity and sedentary behaviour are more frequent in people with RA.

Bearne, Lindsay M., and Christina H. Opava, [Physical activity and exercise](#), in David L. Scott and others (eds), Oxford Textbook of Rheumatoid Arthritis (Oxford, 2020; online edn, Oxford Academic, 1 Sept. 2020)

Less than 14% of people with RA perform physical activity to the recommended levels.

Nicola Cornwall and others, [Implementation of physical activity interventions for people with inflammatory arthritis: an overview and future recommendations](#), *Rheumatology Advances in Practice*, Volume 7, Issue 1, 2023, rkac094

However, being physically active improves health outcomes and is recommended for people with RA.

Lindsay M Bearne, [Physical activity in rheumatoid arthritis—is it time to push the pace of change?](#) Rheumatology Advances in Practice, Volume 7, Issue 1, 2023, rkac107.

Physical activity and exercise can help:

- **physical fitness – strengthen your heart and lungs**
- **muscle strength and endurance**
- **flexibility and range of joint motion**
- **balance**
- **pain and fatigue**
- **depression**
- **prevent a loss of bone density**

Bearne, Lindsay M., and Christina H. Opava, [Physical activity and exercise](#), in David L. Scott and others (eds), Oxford Textbook of Rheumatoid Arthritis (Oxford, 2020; online edn, Oxford Academic, 1 Sept. 2020)

Mayo Clinic. [Rheumatoid arthritis: Is exercise important?](#)

Even if you can at first only manage 10 minutes at a time, it is important to start somewhere. Aim to reduce your physical inactivity and time spent sitting, and slowly increase the amount of time you are active. Your physiotherapist can guide you in an activity program that is right for you.

Bearne, Lindsay M., and Christina H. Opava, [Physical activity and exercise](#), in David L. Scott and others (eds), Oxford Textbook of Rheumatoid Arthritis (Oxford, 2020; online edn, Oxford Academic, 1 Sept. 2020)

Lindsay M Bearne, [Physical activity in rheumatoid arthritis—is it time to push the pace of change?](#) Rheumatology Advances in Practice, Volume 7, Issue 1, 2023, rkac107

Types of exercise

Physical activity and exercise are important for keeping joints as mobile as possible and strengthening muscles. It can also reduce the risk of developing other diseases such as CVD, high blood pressure, osteoporosis and diabetes.

There are different types of exercises you can do that are suitable for people with RA. You should aim to do a mixture of the following:

- **mobility exercises**
- **muscle strengthening exercises**
- **aerobic exercises (exercise that makes you breathe harder)**
- **balance exercises**

Versus Arthritis. [What type of exercise should I do?](#)

InformedHealth.org [Internet]. Cologne, Germany: Institute for Quality and Efficiency in Health Care (IQWiG); 2006-. [Exercise and sports for rheumatoid arthritis](#). Updated May 2020.

National Institute for Health and Care Excellence (NICE). [Rheumatoid arthritis in adults: management](#). Last updated October 2020.

Flares

The symptoms of RA can vary from day to day. They can go from your joints feeling quite good one day, to feeling extremely painful the next, often accompanied with a significant feeling of fatigue. Experiencing an acute escalation in symptoms is called a flare.

Arthritis Foundation. [Understanding Rheumatoid Arthritis Flares](#)

The fear of causing a flare, or if you are experiencing a flare, can discourage physical activity and exercise. A physiotherapist will give you different exercises that you can adapt, depending on the symptoms you are experiencing.

Jordan Canning and others, [Patient experiences of physical activity and exercise in rheumatoid arthritis](#), *Rheumatology Advances in Practice*, Volume 7, Issue 1, 2023, rkac098.

Exercise is a key management strategy for reducing disability and improving overall health in people with RA. A physiotherapist will be able to assess your condition, guide you how to manage your symptoms and on exercises that are right for you, and how to start increasing your physical activity safely.

Lindsay M. Bearne, Victoria L. Manning, Ernest Choy, David L. Scott, Michael V. Hurley, [Participants' experiences of an Education, self-management and upper extremity eXercise Training for people with Rheumatoid Arthritis programme \(EXTRA\)](#). *Physiotherapy*, Volume 103, Issue 4, 2017, Pages 430-438, ISSN 0031-9406

Nicola Cornwall and others, [Implementation of physical activity interventions for people with inflammatory arthritis: an overview and future recommendations](#), Rheumatology Advances in Practice, Volume 7, Issue 1, 2023, rkac094

Veldhuijzen van Zanten JJ, Rouse PC, Hale ED, Ntoumanis N, Metsios GS, Duda JL, Kitas GD. [Perceived Barriers, Facilitators and Benefits for Regular Physical Activity and Exercise in Patients with Rheumatoid Arthritis: A Review of the Literature](#). Sports Med. 2015 Oct;45(10):1401-12. doi: 10.1007/s40279-015-0363-2. PMID: 26219268; PMCID: PMC4579262.

American College of Rheumatology. [2022 Integrative RA treatment guideline](#)

Information sheet 3: Axial spondyloarthritis

Axial Spondyloarthritis (axial SpA) is a type of spondyloarthritis – that is an arthritis that most commonly affects the spine. Axial SpA is an inflammatory condition that mainly affects the bones, joints and ligaments of the spine and pelvis, leading to pain, swelling, and stiffness. It can also cause tendon pain, inflammation of the eye (uveitis) and symptoms in other joints away from the spine. A common subset of axial SpA is ankylosing spondylitis (AS).

Axial SpA and AS usually start in the late teens or early 20s, it is equally common in males and females

NHS. [Arthritis](#)

NHS. [Ankylosing spondylitis](#)

National Axial Spondyloarthritis Society. [What is axial SpA?](#)

Versus Arthritis: [Ankylosing spondylitis](#)

Symptoms of axial SpA

Pain in the pelvis and back are the main symptoms of axial SpA. It particularly affects the sites at which tendons and/or ligaments join onto bone. The most commonly affected region are the sacroiliac joints. Other symptoms and signs of axial SpA include:

pain and stiffness at the lower back, buttocks, mid-back or neck

- **pain and stiffness typically worse at night or after prolonged rest**
- **pain and stiffness which improves with activity**
- **joint pain and swelling in the limbs, which can be on different sides and may move around**
- **swelling of fingers and/or toes**
- **waking at night with symptoms, especially in the second half of the night**
- **symptoms that significantly improve with anti-inflammatory medication such as ibuprofen**
- **recurrent tendon pain, eg Achilles tendon pain, tennis elbow, patella (knee cap) tendinopathy, plantar fasciitis (base of heel pain)**
- **decreased ability to do daily activities including work, home and recreational interests**
- **fatigue or tiredness**
- **other organs can also be affected with ongoing inflammation, including the eyes (uveitis), the skin (psoriasis), and the digestive system (Crohn's disease, ulcerative colitis, and irritable bowel disease)**

painHEALTH. Government of Western Australia, Department of Health. [Ankylosing Spondylitis](#). Last updated February 2020

National Axial Spondyloarthritis Society. [What is axial SpA?](#)

The role of physiotherapy

People with axial SpA should be referred to a physiotherapist to start an individualised, structured exercise programme, which should include:

- **spinal and other joint mobility exercises, including stretching and postural exercises**
- **muscle strengthening exercises**
- **deep breathing**
- **aerobic exercise**

A physiotherapist will also provide advice on:

-
- **education about the condition**
 - **how to self manage**
 - **practical pain coping strategies**
 - **activity pacing**
 - **reintegration to work and social activities**
 - **support to adopt healthy behaviours**
 - **management of common co-morbid conditions – tendon pain, osteoporosis**

National Institute for Health and Care Excellence (NICE). [Spondyloarthritis in over 16s: diagnosis and management - Non-pharmacological management of spondyloarthritis](#). Last updated June 2017

painHEALTH. Government of Western Australia, Department of Health. [Ankylosing Spondylitis](#). Last updated February 2020

World Health Organization: [WHO guidelines on physical activity and sedentary behaviour](#). November 2020

National Axial Spondyloarthritis Society. [Managing my axial SpA](#).

Sveaas SH, Dagfinrud H, Berg IJ, Provan SA, Johansen MW, Pedersen E, Bilberg A. [High-Intensity Exercise Improves Fatigue, Sleep, and Mood in Patients With Axial Spondyloarthritis: Secondary Analysis of a Randomized Controlled Trial](#). Phys Ther. 2020 Aug 12;100(8):1323-1332. doi: 10.1093/ptj/pzaa086. PMID: 32367124; PMCID: PMC7439225.

Sveaas SH, Bilberg A, Berg IJ, Provan SA, Rollefstad S, Semb AG, Hagen KB, Johansen MW, Pedersen E, Dagfinrud H. [High intensity exercise for 3 months reduces disease activity in axial spondyloarthritis \(axSpA\): a multicentre randomised trial of 100 patients](#). Br J Sports Med. 2020 Mar;54(5):292-297. doi: 10.1136/bjsports-2018-099943. Epub 2019 Feb 11. PMID: 30745314.

Prescribed exercise

A specific prescribed exercise plan that is tailored to you can help maintain spinal flexibility, whole body flexibility, and reduce pain. Even when you have pain, continuing to exercise at levels that suit you has significant benefits.

National Axial Spondyloarthritis Society. [Exercise](#)

painHEALTH. Government of Western Australia, Department of Health. [Ankylosing Spondylitis](#). Last updated February 2020

Why exercise with axial SpA

In addition to medication, regular exercise is important in the management of axial SpA.

Exercise will:

- **help you keep moving**
- **help you do the things that are important**
- **reduce pain and stiffness**
- **strengthen muscles and joints**
- **improve heart and lungs**
- **help manage fatigue and sleep**

painHEALTH. Government of Western Australia, Department of Health. [Ankylosing Spondylitis](#). Last updated February 2020

National Institute for Health and Care Excellence (NICE). [Spondyloarthritis in over 16s: diagnosis and management - Non-pharmacological management of spondyloarthritis](#). Last updated June 2017

Physiotherapists play an important role in helping people with axial SpA manage pain and maintain participation in daily work, home, and recreational activities.

painHEALTH. Government of Western Australia, Department of Health. [Ankylosing Spondylitis](#). Last updated February 2020

Information sheet 4: Overcoming barriers to exercise

Regular physical activity and exercise are important in the management of all forms of inflammatory arthritis (IA), including for rheumatoid arthritis (RA) and axial spondyloarthritis (axial SpA), and offer numerous health benefits. Despite this, people with IA are often inactive, and express many concerns and fears about engaging in physical activity.

Nicola Cornwall and others, [Implementation of physical activity interventions for people with inflammatory arthritis: an overview and future recommendations](#), Rheumatology Advances in Practice, Volume 7, Issue 1, 2023, rkac094

Veldhuijzen van Zanten JJ, Rouse PC, Hale ED, Ntoumanis N, Metsios GS, Duda JL, Kitas GD. [Perceived Barriers, Facilitators and Benefits for Regular Physical Activity and Exercise in Patients with Rheumatoid Arthritis: A Review of the Literature](#). Sports Med. 2015 Oct;45(10):1401-12. doi: 10.1007/s40279-015-0363-2. PMID: 26219268; PMCID: PMC4579262.

American College of Rheumatology. [2022 Integrative RA treatment guideline](#)

It hurts too much to exercise

Movement, physical activity and exercise may help to reduce the amount of pain. Experiencing some pain is usually a normal part of symptom management. A physiotherapist will be able to guide you on how to start moving and exercising in a safe paced way.

Avoiding movement may make symptoms worse. Remember, lack of physical activity is also associated with several other conditions such as heart disease, pulmonary disease, diabetes and obesity, so there is much to gain from getting moving.

painHEALTH. Government of Western Australia, Department of Health. Movement with pain. Last updated July 2021

Thompson WR, Sallis R, Joy E, Jaworski CA, Stuhr RM, Trilk JL. [Exercise Is Medicine](#). Am J Lifestyle Med. 2020 Apr 22;14(5):511-523. doi: 10.1177/1559827620912192. PMID: 32922236; PMCID: PMC7444006.

Exercise might damage my joints further

Exercise, including weight lifting and high intensity types of exercise have been shown to be beneficial and safe for people with arthritis.

Although exercise can sometimes cause pain, this is usually a sign of adaptation to a new activity, or if the pain persists that the activity might be too much for your current capacity. It is not a sign that further damage has occurred to the joints.

Veldhuijzen van Zanten JJ, Rouse PC, Hale ED, Ntoumanis N, Metsios GS, Duda JL, Kitas GD. [Perceived Barriers, Facilitators and Benefits for Regular Physical Activity and Exercise in Patients with Rheumatoid Arthritis: A Review of the Literature](#). Sports Med. 2015 Oct;45(10):1401-12. doi: 10.1007/s40279-015-0363-2. PMID: 26219268; PMCID: PMC4579262.

Versus Arthritis. [Exercising with arthritis](#)

Versus Arthritis. [Physiotherapy](#)

American College of Rheumatology. [2022 Integrative RA treatment guideline](#)

Exercise might cause a “flare”

There are times when symptoms can increase – joints may swell more, be more painful and may be warm to touch. This is known as a “flare”. This may happen if you have overdone things, including over-exercising. It’s important that during flares you modify (not stop) your physical activity and allow your body to recover.

A physiotherapist will be able to advise you on how to modify your activity levels during a flare, as well as how to exercise safely to reduce the risk of causing a flare.

painHEALTH. Government of Western Australia, Department of Health. [Rheumatoid Arthritis](#)

Exercise will make me more tired

Pain and exhaustion can make it hard to be physically active, particularly at first when your body isn't used to it. However, exercise and physical activity improve physical fitness and strength, and can also help reduce disease-related exhaustion and boost your mood.

A physiotherapist will be able to advise you on how to start exercising, as well as how to gradually increase it as your body gets stronger.

National Library of Medicine. [Exercise and sports for rheumatoid arthritis](#). Last update May 2020

Pope JE. [Management of Fatigue in Rheumatoid Arthritis](#). RMD Open 2020;6:e001084. doi: 10.1136/rmdopen-2019-001084

American College of Rheumatology. [2022 Integrative RA treatment guideline](#)

Physiotherapy is an important part of your overall treatment.

A physiotherapist will guide you on how to exercise safely, increase your activity levels, set goals and find the right balance between rest and activity.

As part of a healthcare team, physiotherapists will help you resume or maintain an active and independent life, both at home and work.

American College of Rheumatology. [2022 Integrative RA treatment guideline](#)

Versus Arthritis: [Physiotherapy | Benefits and how it can help | Versus Arthritis](#)

painHEALTH. Government of Western Australia, Department of Health. [Rheumatoid Arthritis](#)

National Institute for Health and Care Excellence (NICE). [Rheumatoid arthritis in adults: management](#). Last updated: 12 October 2020

Physiopedia. [Rheumatoid arthritis](#)

Veldhuijzen van Zanten JJ, Rouse PC, Hale ED, Ntoumanis N, Metsios GS, Duda JL, Kitas GD. [Perceived Barriers, Facilitators and Benefits for Regular Physical Activity and Exercise in Patients with Rheumatoid Arthritis: A Review of the Literature](#). Sports Med. 2015 Oct;45(10):1401-12. doi: 10.1007/s40279-015-0363-2. PMID: 26219268; PMCID: PMC4579262.

Information sheet 5: Juvenile idiopathic arthritis

About JIA

Arthritis is often associated with older people, but it can also affect children. Most types of childhood arthritis are known as juvenile idiopathic arthritis (JIA). JIA causes swelling, inflammation, and pain in one or more joints.

There are a variety of triggers for JIA and sometimes the trigger is unknown. For some children, JIA goes into remission over time, but with good management from a multidisciplinary team, most young people with JIA can lead a normal life.

If you/your child is diagnosed with inflammatory arthritis, lasting more than six weeks, before their 16th birthday, it's called JIA. It most commonly occurs between ages 2-6 and 12-14, and is slightly more common in girls.

Hersh AO, Prahalad S. [Genetics of Juvenile Idiopathic Arthritis](#). Rheum Dis Clin North Am. 2017 Aug;43(3):435-448. doi: 10.1016/j.rdc.2017.04.007. PMID: 28711144.

NHS. [Arthritis](#)

Versus arthritis: [What is juvenile idiopathic arthritis?](#)

Versus arthritis: [What is rheumatoid arthritis?](#)

National Institute for Health and Care Excellence (NICE). [NICE recommends treatment for people with juvenile idiopathic arthritis](#). September 2021

JIA affects approximately 1 in 1000 children.

Hersh AO, Prahalad S. [Genetics of Juvenile Idiopathic Arthritis](#). Rheum Dis Clin North Am. 2017 Aug;43(3):435-448. doi: 10.1016/j.rdc.2017.04.007. PMID: 28711144.

Symptoms of JIA

There are several different subtypes of JIA and symptoms vary between them. Knowing which subtype you/your child has helps the medical team provide the best treatment.

You should see a doctor if you/your child has any of these symptoms for more than a couple of weeks:

- painful, swollen or stiff joint(s), particularly in the mornings
- back pain that is particularly worse in the morning
- joint(s) that are warm to touch
- increased tiredness
- a fever that keeps returning
- a limp but no injury

The earlier someone is diagnosed with JIA, the better. This is so that effective treatment can be started to improve symptoms and return to all activities..

Versus arthritis: [What is juvenile idiopathic arthritis?](#)

Exercising with JIA

It is important to keep exercising if you/your child has JIA. It will help maintain general fitness and make muscles stronger and more flexible. This will help prevent damage to joints, improve movement, coordination, confidence, and quality of life.

A physiotherapist will create an exercise plan to suit you/ your child's needs. As the arthritis becomes controlled and general fitness improves, you/your child can slowly start to make the exercises harder.

Versus arthritis: [What is juvenile idiopathic arthritis?](#)

Metsios GS, Moe RH, Kitas GD. [Exercise and inflammation](#). Best Pract Res Clin Rheumatol. 2020 Apr;34(2):101504. doi: 10.1016/j.berh.2020.101504. Epub 2020 Apr 2. PMID: 32249021.

Physiotherapy for JIA

Physiotherapists work with children and their families (and sometimes schools and sports coaches) to co-develop a plan to:

- **improve physical function (mobility, dexterity, strength, endurance)**
- **support you and your family to implement rehabilitation exercises into a normal routine**
- **support knowledge and skills in pain management**
- **help you/your child work towards meaningful life goals related to activity (eg sports or other physical hobbies)**
- **provide advice, guidance or prevention strategies to avoid or reduce future musculoskeletal (sports) injury**
- **build your/your child's confidence in their own physical abilities**
- **help problem solve and manage difficult situations that may arise.**

Versus arthritis: [What is juvenile idiopathic arthritis?](#)

Versus arthritis: [What is rheumatoid arthritis?](#)

Poster 1: Exercising with arthritis

Regular physical activity and exercise are important in the management of all forms of inflammatory arthritis (IA), including rheumatoid arthritis (RA) and axial spondyloarthritis (axial SpA), and offer numerous health benefits.

Nicola Cornwall and others, [Implementation of physical activity interventions for people with inflammatory arthritis: an overview and future recommendations](#), *Rheumatology Advances in Practice*, Volume 7, Issue 1, 2023, rkac094

Veldhuijzen van Zanten JJ, Rouse PC, Hale ED, Ntoumanis N, Metsios GS, Duda JL, Kitas GD. [Perceived Barriers, Facilitators and Benefits for Regular Physical Activity and Exercise in Patients with Rheumatoid Arthritis: A Review of the Literature](#). *Sports Med.* 2015 Oct;45(10):1401-12. doi: 10.1007/s40279-015-0363-2. PMID: 26219268; PMCID: PMC4579262.

American College of Rheumatology. [2022 Integrative RA treatment guideline](#)

Physiotherapy is an important part of your overall treatment.

A physiotherapist will guide you on how to exercise safely, increase your activity levels and set goals

American College of Rheumatology. [2022 Integrative RA treatment guideline](#)

Versus Arthritis: [Physiotherapy | Benefits and how it can help | Versus Arthritis](#)

painHEALTH. Government of Western Australia, Department of Health. [Rheumatoid Arthritis](#)

National Institute for Health and Care Excellence (NICE). [Rheumatoid arthritis in adults: management](#). Last updated: 12 October 2020

Physiopedia. [Rheumatoid arthritis](#)

Veldhuijzen van Zanten JJ, Rouse PC, Hale ED, Ntoumanis N, Metsios GS, Duda JL, Kitas GD. [Perceived Barriers, Facilitators and Benefits for Regular Physical Activity and Exercise in Patients with Rheumatoid Arthritis: A Review of the Literature](#). *Sports Med.* 2015 Oct;45(10):1401-12. doi: 10.1007/s40279-015-0363-2. PMID: 26219268; PMCID: PMC4579262.

Poster 2: Physiotherapy and arthritis

How physiotherapy can help

Physiotherapists are part of a multidisciplinary team that can help you manage your arthritis. They will help you stay active and keep moving.

Strategies might include:

- **devising a tailored exercise programme**
- **building your strength, stamina, mobility, and activity levels**
- **supporting you to develop skills to manage pain, swelling, and stiffness**

Versus Arthritis: [Physiotherapy | Benefits and how it can help | Versus Arthritis](#)

National Institute for Health and Care Excellence (NICE). [Rheumatoid arthritis in adults: management. Non-pharmacological management](#). Last updated: 12 October 2020

Poster 3: CVD and RHEUMATOID arthritis

People with rheumatoid arthritis (RA) and other inflammatory joint disorders have an increased risk of cardiovascular disease (CVD).

Agca R, Heslinga SC, Rollefstad S, Heslinga M, McInnes IB, Peters MJ, Kvien TK, Dougados M, Radner H, Atzeni F, Primdahl J, Södergren A, Wallberg Jonsson S, van Rompay J, Zabalan C, Pedersen TR, Jacobsson L, de Vlam K, Gonzalez-Gay MA, Semb AG, Kitis GD, Smulders YM, Szekanecz Z, Sattar N, Symmons DP, Nurmohamed MT. [EULAR recommendations for cardiovascular disease risk management in patients with rheumatoid arthritis and other forms of inflammatory joint disorders](#): 2015/2016 update. *Ann Rheum Dis*. 2017 Jan;76(1):17-28. doi: 10.1136/annrheumdis-2016-209775. Epub 2016 Oct 3. PMID: 27697765.

People with RA can experience twice the risk of developing heart failure.

Kanishk Jain and others, [Long-term outcomes in Rheumatoid Arthritis: Review of data from the 'Basildon Inflammatory Arthritis Cohort'](#), *Rheumatology Advances in Practice*, Volume 6, Issue 3, 2022, rkac075

Being physically active improves health outcomes, and is recommended for people with RA.

Physical activity and exercise can help:

- **physical fitness**
- **muscle strength**
- **flexibility**
- **balance**
- **pain and fatigue**
- **depression**
- **prevent loss of bone density**

Lindsay M Bearne, [Physical activity in rheumatoid arthritis—is it time to push the pace of change?](#) *Rheumatology Advances in Practice*, Volume 7, Issue 1, 2023, rkac107

Bearne, Lindsay M., and Christina H. Opava, [Physical activity and exercise](#), in David L. Scott and others (eds), *Oxford Textbook of Rheumatoid Arthritis* (Oxford, 2020; online edn, Oxford Academic, 1 Sept. 2020), accessed 27 June 2023.

Mayo Clinic. [Rheumatoid arthritis: Is exercise important?](#)

Banner 1

Exercising with arthritis

Regular physical activity and exercise are important in the management of all forms of inflammatory arthritis and offer numerous health benefits

Nicola Cornwall and others, [Implementation of physical activity interventions for people with inflammatory arthritis: an overview and future recommendations](#), *Rheumatology Advances in Practice*, Volume 7, Issue 1, 2023, rkac094

Veldhuijzen van Zanten JJ, Rouse PC, Hale ED, Ntoumanis N, Metsios GS, Duda JL, Kitas GD. [Perceived Barriers, Facilitators and Benefits for Regular Physical Activity and Exercise in Patients with Rheumatoid Arthritis: A Review of the Literature](#). *Sports Med.* 2015 Oct;45(10):1401-12. doi: 10.1007/s40279-015-0363-2. PMID: 26219268; PMCID: PMC4579262.

American College of Rheumatology. [2022 Integrative RA treatment guideline](#)

Banner 2

Physiotherapy can help you manage arthritis

Physiotherapists are part of a multidisciplinary team that can help you manage your arthritis, and help you stay active and keep moving. They may:

- **devise a tailored exercise programme for you**
- **help build your strength, stamina, mobility, and activity levels**
- **support you to develop skills to manage pain, swelling, and stiffness**

Versus Arthritis: [Physiotherapy | Benefits and how it can help | Versus Arthritis](#)

National Institute for Health and Care Excellence (NICE). [Rheumatoid arthritis in adults: management. Non-pharmacological management](#). Last updated: 12 October 2020

Additional reading and resources

Versus Arthritis: www.versusarthritis.org/

National Axial Spondyloarthritis Society (NASS): <https://nass.co.uk/>

Rheumatology Physio: <https://rheumatology.physio/>

Musculoskeletal Association of Chartered Physiotherapists (MACP) - Rheumatology clinical interest group: <https://www.macpweb.org/Rheumatology>

[Strengthening And stretching for Rheumatoid Arthritis of the Hand \(SARAH\) hand and arm exercise programme](#) (recommended by NICE)

Srikesavan C, Williamson E, Cranston T, Hunter J, Adams J, Lamb SE. [An Online Hand Exercise Intervention for Adults With Rheumatoid Arthritis \(mySARAH\): Design, Development, and Usability Testing](#). *J Med Internet Res.* 2018 Jun 27;20(6):e10457. doi: 10.2196/10457. PMID: 29950288; PMCID: PMC6041557.