

Hand conditions Your questions answered

Q. What are musculoskeletal conditions?

A. Musculoskeletal conditions affect the muscles, bones and/or joints. There are over 150 different types, including <u>osteoarthritis</u>, <u>back pain</u>, <u>rheumatoid arthritis</u>, <u>fibromyalgia</u>, <u>gout</u>, <u>polymyalgia rheumatica</u>, <u>lupus</u>, <u>osteoporosis</u> and <u>ankylosing spondylitis</u>.

Anyone can get a musculoskeletal condition, including <u>children</u>. They affect people from all backgrounds and lifestyles. In fact, around 7 million Australians report having a musculoskeletal conditionⁱ.

Q. What conditions affect hands?

A. Many types of arthritis and musculoskeletal conditions can affect your hands and significantly impact your daily activities and livelihood. The most common conditions are:

Osteoarthritis (OA) was once thought to be an inevitable part of ageing, resulting from a lifetime of 'wear and tear' on joints. However, it's now understood that it's a complex condition and may occur due to many factors. OA can affect any of the joints in the body but commonly affects the wrists, finger joints and thumb. Pain at the base of the thumb can cause pain and difficulty when gripping or pinching objects. Fingers may develop 'bony knots' called nodes in the middle finger joints (Bouchard's nodes) or the joints at the end of the finger (Heberden's nodes).

Rheumatoid arthritis (RA) is an autoimmune disease that affects many joints in the body. RA often starts in smaller joints such as in the hand or wrist and can cause symptoms such as pain, swelling, inflammation and loss of function. Some people develop rheumatoid nodules (small, fleshy lumps under the skin) and changes to the look and structure of the joint in their hands and wrist.

However, it's important to note that many joint deformities are now prevented with early diagnosis and new, more effective treatments available for RA.

<u>Gout</u> is a common form of arthritis associated with high levels of uric acid in the blood. This causes crystals to form in the joints. The most commonly affected joint is the big toe, but gout can also affect your wrists and fingers. A gout attack usually comes on very quickly, often overnight, with the joint becoming red, swollen and intensely painful to touch.

<u>Psoriatic arthritis</u> (PsA) is a form of arthritis accompanied by the skin disease psoriasis. Joint involvement can cause inflammation of the entire finger, giving a sausage-like appearance.



Many people with PsA experience changes in the fingernails, including pitting, thickening and/or separation from the nail bed.

<u>Raynaud's phenomenon</u> is caused by a narrowing of the blood vessels to the extremities, usually the fingers and toes, in response to cold temperatures or stress. When this happens, the blood flow is restricted. This causes your fingers to become cold and turn white, then blue. When blood flow returns, your skin will return to its normal colour.

<u>Carpal tunnel syndrome</u>. The carpal tunnel is a narrow passageway in the wrist through which the median nerve runs. The median nerve gives feeling to the thumb, forefinger, middle finger and half of the ring finger. If there is swelling inside the tunnel, the nerve can become compressed.

If this happens, you may experience pain, weakness, numbness, and/or pins and needles in the hand and wrist. The pain may also radiate up into your arm and shoulder.

<u>Scleroderma</u> (or systemic sclerosis) is a chronic connective tissue disease involving the skin and internal organs. Scleroderma, literally translated, means 'hard skin'. Although there are several different forms of scleroderma, all can cause thickening and tightening of the skin of the fingers. This can make it harder to bend or straighten the fingers.

<u>Stenosing tenosynovitis</u> (trigger finger) occurs when the tendon at the base of a finger or thumb becomes inflamed, restricting its ability to move the finger. When this happens, the affected finger/thumb may get stuck in a bent position and bend or straighten with a snap. Symptoms include stiffness (particularly in the morning), pain and a popping or catching feeling in the affected finger or thumb.

<u>Dupuytren's contracture</u> is a gradual thickening and tightening of a deep layer of tissue in the palm of the hand (palmar fascia) that extends across the palm to the fingers. Over time this tightening may cause clawing of the fingers as they're pulled towards the palm. Any finger can be involved; however, the ring and little fingers are most commonly affected.

Q. What treatments are available?

A. Some people can manage painful hands with self-care, such as <u>heat and cold packs</u>, rest and <u>gentle exercise</u>. However, other people will require medical treatment to manage.

Depending on the underlying condition causing the problem in your hand/s, your doctor may suggest <u>analgesics</u> (pain relieving medicines) or <u>non-steroidal anti-inflammatory drugs</u> (NSAIDs) for pain relief. <u>Topical creams</u> and gels applied directly to the skin are preferred over oral NSAIDs because less medication is absorbed into your bloodstream, which reduces the risk of side effects.

A cortisone injection isn't generally recommended for osteoarthritis of the hand but may be used for rheumatoid arthritis or acute gout attacks. In conditions such as rheumatoid arthritis, you'll also be taking medicines to control your condition. It's important that you take them as prescribed by your doctor.

Q. What can I do to control my symptoms?

A. You can do many things to look after your hands – whether you have a musculoskeletal condition or not.

Take care of your hands. Wash and dry them regularly. Inspect them for irregularities such as swelling, nail and skin changes and any changes to the joint shape or direction of fingers and/or thumbs. You can seek professional advice when needed by being aware of your hands and any changes that occur.

Use assistive devices. When your hands are painful or stiff many previously simple daily tasks at home and work can become difficult. Fortunately, there are plenty of aids, gadgets and other equipment that can help reduce stress on your muscles and joints, prevent and relieve pain, save energy, prevent fatigue, and



basically <u>make your life easier</u>. Aids and equipment can help you with everything from cooking, cleaning, bathing, writing, mobility, technology and driving. You can buy some of this equipment from pharmacies, medical suppliers, hardware stores, and <u>us!</u> Or depending on your needs, you may need to speak with an occupational therapist about what equipment is best for you.

See a hand therapist. If you have hand/wrist pain or a condition that affects your hands, seek the advice and expertise of a <u>hand therapist</u>. Hand therapists are occupational therapists or physiotherapists who've undergone advanced training to become experts in assessing, diagnosing and treating upper limb problems (shoulder to hand). They can provide advice on joint protection and energy conservation (e.g. splints) as well as recommendations for aids and equipment to improve hand function and reduce pain.

Find out about splints and supports. Various types of hand splints, gloves or sleeves can support a painful joint by providing mild compression, warmth and/or joint protection. The two main types are resting splints and working splints. The choice of splint will depend on your condition and your current needs. Splints need to fit your hand comfortably and correctly, so speak with a hand therapist about what's best for you and how often you should wear them.

Exercise your hands. For healthy joints, you need to keep them moving. Regular hand exercises can reduce stiffness and support your joints by keeping your muscles strong. If you're considering hand exercises, it's best to get advice from a hand therapist or physiotherapist on which exercises are best for you. It's also important to remember that exercises should be gentle and not cause additional pain when doing them. See page 5 for some range of motion exercises.

Wear gloves. If you have Raynaud's phenomenon, keep your hands warm with gloves. Hand warmers are also helpful.

Q. How can I look after my hands better and prevent problems from occurring?

A. Sometimes, simply changing the way you do everyday tasks can help to reduce pain and protect your joints. You can make life easier on your hands by doing the following.

Take notice of your pain. It can be a warning sign that your joints are being overworked. That's why you need to find a balance between activity and rest by <u>pacing</u> yourself. When doing tasks that strain your hands, take regular breaks and stretch or wiggle your fingers. Heat or cold packs can be soothing on sore hands. Some people like to soak their hands in warm water or wrap their hands around a warm mug of tea.

Avoid using a tight grip over an extended period, for example:

- use foam or sponge to increase the grip size of handles on cutlery, pens and other handheld devices
- use assistive devices with thick rubber grip handles (e.g. key turners, jar openers)
- use rubber squares and gloves to help improve grip
- consider lever handles around your home to minimise twisting forces, e.g. mixer taps in bathrooms/kitchens.

Avoid repetitive movements, for example:

- prolonged typing, pruning and power tool usage (particularly those that vibrate)
- when gardening, ensure your tools are sharpened and well maintained for ease of use
- remember to take regular breaks from tasks that require repetitive movements.



Use your body's larger joints and muscles when you can, for example:

- use your forearms to carry bags instead of your hands
- when carrying items, hold them closer to your body.

Spread the load of an object over more than one joint, for example:

- when picking up objects, use two hands
- slide sheets and swivel pads can help move items with less strain
- divide shopping into smaller bags and try using a backpack and/or trolley.

Find an alternative, for example:

- buy pre-cut meat and vegetables instead of cutting them up yourself
- use electrical items instead of manual, e.g. can openers and graters
- look for items that are easier to use, e.g. push-on pegs
- keep a pair of scissors handy to open packaging
- ask for help with some tasks.

Rethink personal care/hygiene. For people with decreased hand function or fine motor skills, everyday tasks such as showering and toileting can be challenging. To make things easier, you could use:

- a bidet to help with cleaning difficult to reach areas
- baby wipes/moist towelettes instead of toilet paper (but remember they're not flushable)
- toilet paper tongs/aids to help with grip
- soap dispensers instead of a bar of soap
- items to make dressing easier, e.g. sock sliders, elastic shoe laces, buttonhole hooks/zip pullers, front fastening bras, as well as dressing aids for coats and cardigans
- shoes with velcro fasteners instead of laces.

Before doing any hand strengthening activities, you should discuss this with a qualified hand therapist. This will ensure you're not doing further damage.



Q. What exercises can I do?

A. These exercises should be comfortable to perform. Try doing 5 repeats of each exercise a few times per day. We'd like to thank Newtown Hand Therapy for providing these hand exercises.



Straighten fingers
Straighten fingers as much as possible.



Claw fist
Bend fingers at the first 2 joints, keeping
the big knuckles straight.



Full fist

Bend fingers at knuckles and at finger
joints as far as possible.



Touch each finger to thumb (aim for a circle shape) and stretch thumb out to side (so thumb is in line with straight fingers



Touch small finger and then slide down



Move wrist back, hold for 5 seconds, then bend wrist forward and hold for 5 seconds. Fingers should be bent (in a comfortable position).

Q. What about surgery?

A. In some cases, <u>surgery</u> may be needed if all other treatments haven't worked. Your GP will refer you to an orthopaedic surgeon to discuss your options.

Q. Where can I get more help?

A. Many people and support organisations can help you manage your musculoskeletal condition. They include:

- your doctor
- Accredited Hand Therapist
- physiotherapist
- occupational therapist
- <u>orthopaedic surgeon</u>
- Musculoskeletal Australia | msk.org.au | National Arthritis and Back Pain+ Help Line: 1800 263 265

Q. How can Musculoskeletal Australia help?

A. Our nurses are available for you to speak with about arthritis and other musculoskeletal conditions, exercise, pain or any other musculoskeletal issues you have. You can contact them on weekdays between 9am-5pm. Phone 1800 263 265 or email helpline@msk.org.au. We also have a range of services – including free webinars – you can access on our website.



More to explore

- 10 tips for protecting your hands and arms when cycling
 Musculoskeletal Australia
- Arthritis of the hand American Academy of Orthopaedic Surgeons
- <u>Can a hand therapist help you?</u>
 Musculoskeletal Australia
- <u>Five tips for healthy hands</u>
 Musculoskeletal Australia
- <u>Hand conditions and tips for joint protection</u>
 Musculoskeletal Australia
- Osteoarthritis of the hand and wrist
 Versus Arthritis

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Reference

¹ Chronic musculoskeletal conditions, Australian Institute of Health and Welfare. Accessed 2 August 2022.