

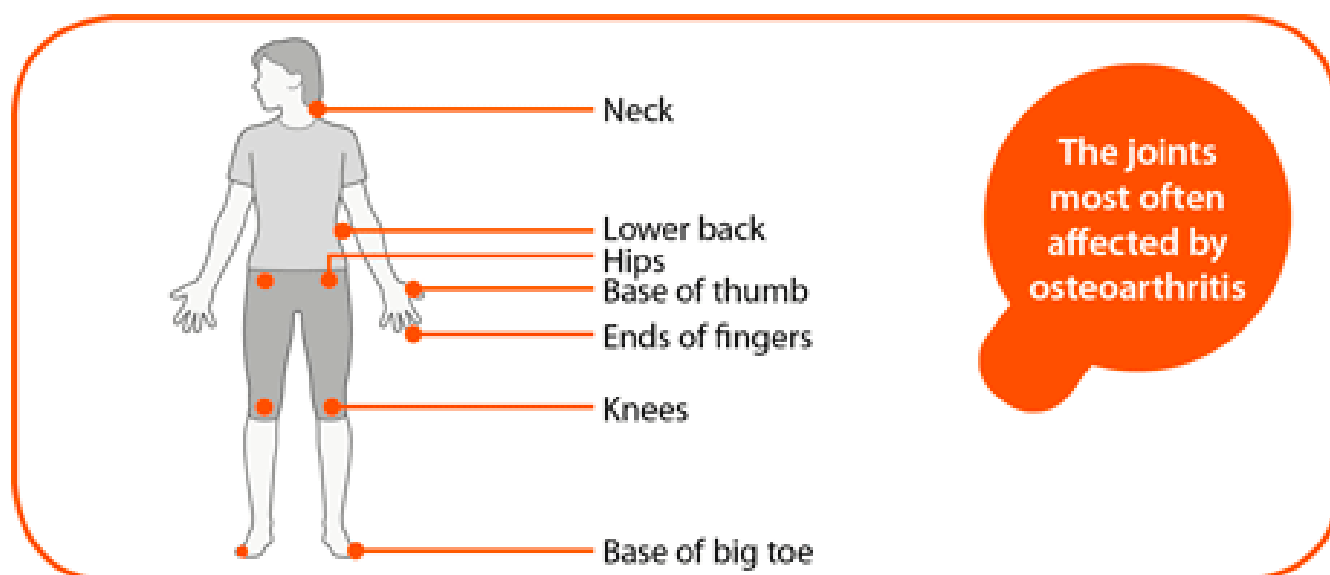
# Osteoarthritis of the hand and wrist: advice and exercises

**This leaflet is for patients diagnosed with osteoarthritis and outlines suitable exercises to reduce stiffness and improve strength as recommended by the Rheumatology Physiotherapy and Occupational Therapy Team.**

## What is osteoarthritis?

Osteoarthritis (OA) is the most common type of arthritis. It is sometimes known as a “wear and repair” arthritis. Forces going through the joints can cause wearing of the surface layer of cartilage on the ends of the bone. This can lead to the formation of new rough pieces of bone called osteophytes, which can in turn lead to changes in the shape of the joints.

These changes often occur in weight bearing joints (such as hips and knees). OA can also affect small joints of the hand. It is most common in these areas:



*Image courtesy of Versus Arthritis*

## How will OA affect me?

The effect that OA has varies between individuals, and some people may be more prone to OA due to a genetic component (i.e. it runs in families). Two people with similar lifestyle or jobs may not have the same changes to their joints, and two people with similar changes to each other may find that they do not have the same levels of pain and dysfunction in their hands. Many people report pain and stiffness, which can lead to weakness affecting the function of that part of your body.

## Advice and exercises to help manage your OA




Here are some self-management suggestions to help you maintain hand function and strength and which can also help with pain.

### Exercises:

#### 1. Joint range of motion exercises

It is important to keep the joints of your hands mobile. So, within the limits of pain, do some gentle stretching exercises to the end of the range of movement – this means to the point at which you start to feel stiffness. Do these little and often to get the best results.

Do each one slowly, holding the position for 3-5 seconds each. Repeat as able within the limits of pain, for example, a few repetitions of each 3-4 times per day if you are able.

<p><b>Hook</b> Bend the top two joints of your fingers, keeping your knuckles straight. Hold for 3 seconds, then bring straight again.</p>	
<p><b>O's</b> Practice touching the tip of each finger with your thumb, bringing the thumb out and round to make an O shape. Also practice sliding the thumb from the top of the little finger down to its base.</p>	
<p><b>Fist</b> Bend all of your finger joints down into your palm. Hold there for 3 seconds, then bring straight again.</p>	

You should also practice bending your wrists forwards, and then back, and practice turning your palms up to face the ceiling and then down to the floor again

## 2. Strengthening exercises

It is also important to maintain the strength in your hands. Areas of weakness, such as in the muscles at the base of the thumb, can place even more strain on the joints. Keeping the dexterity and strength may also help with your ability to use your hands. Add in strengthening exercises when the joints are not too painful or inflamed.

### 2a) Simple thumb strengthening without equipment:

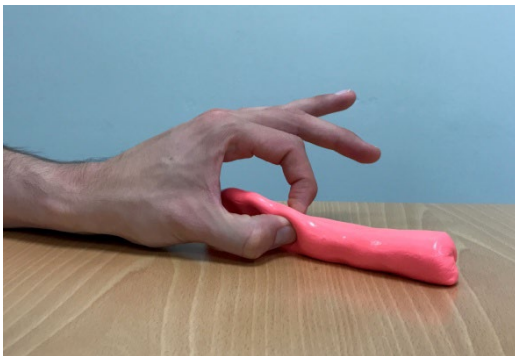
As an easy way of exercising the muscles at the base of the thumb, practice:

- Pinch each finger together with the thumb in turn and give a tight squeeze, making a good round 'O' shape. Try not to let the thumb collapse or the joints hyperextend (bend backwards).
- Make an 'O' with your thumb and index finger. Try to break the 'O' with your other hand, but don't let it. Give a little resistance for a few seconds.
- Lift your thumb away from your hand in a 'thumbs up' position, then bend the tip of your thumb.

### 2b) Further strengthening with simple equipment:

You can use a soft ball or sponge, therapeutic putty or even clothes pegs for these exercises. The idea is to do them a little and often, and you can progress by increasing how many you do, or the resistance (such as with firmer putty or sponges). Ideally, aim for a variety of hand movements, rather than only squeezing. For example, with putty try: rolling and pinching, squeezing, digging the thumb in and manipulating it in one hand.

An occupational therapist or physiotherapist who works in hand therapy can give you more detailed guidance if needed.



## Looking after your joints

You can also think about ways of looking after the joints by reducing strain on them:

### Splints / supports:

Sometimes, it is appropriate to use a splint either at rest to support the joint and relieve pain, or for particular aggravating tasks to reduce the strain going through the joints. Only wear them for specific tasks, or as directed, as they can lead to further stiffness and weakness if used continuously. There are many types available to purchase, or if you need something specific

you might be referred on to the OT or physiotherapy departments for a hand therapist to fit or make one for you.

### Joint protection principles

- If you are replacing items, chose ergonomic alternatives with wide, non-slip handles that place less strain through the small joints of your hands.
- Think about alternative ways of doing things, such as using a straining spoon to get items out of a saucepan rather than lifting and tipping it. Or, think about doing two trips from the car to the house with shopping, rather than carrying it all in one go!
- Use the largest joint possible for a job (if it isn't painful), such as putting bags on your forearms or using rucksacks on your shoulders instead of taking the weights through the small joints of your fingers and the base of your thumb.
- Use as many joints as possible – spread weight over both hands / arms when lifting.
- Use your joints in positions where they are in a good natural alignment and avoid doing tasks in awkward positions or ways that push the joints sideways into positions they don't naturally move into. For example, avoid pushing up from a chair using the side of the fingers, as this puts sideways force through them. Instead, push up through the palm of your hand.
- Get into the habit of doing tasks in small chunks, or changing position between activities that use your joints. If you do a lot of work in one position, such as sitting at a computer, build movement breaks into your day and regularly take your hands away from the keyboard to do stretches.
- Many shops now supply ergonomic equipment, from specialist living aid shops to supermarkets. There are also numerous options online, including:
  - [Livingmadeeasy.org.uk](http://Livingmadeeasy.org.uk)
  - [Arthr.com](http://Arthr.com)
  - [Activehands.com](http://Activehands.com)

### Further reading

<https://www.versusarthritis.org/media/22908/osteoarthritis-information-booklet.pdf>

<https://www.versusarthritis.org/media/24668/looking-after-your-joints-information-booklet-2022.pdf>

### Contacting us

For further information or queries about these exercises, please contact Physiotherapy Outpatient Department on 0118 322 7811 / 7812 email [royalberks.physiotherapy@royalberkshire.nhs.uk](mailto:royalberks.physiotherapy@royalberkshire.nhs.uk).

To find out more about our Trust visit [www.royalberkshire.nhs.uk](http://www.royalberkshire.nhs.uk)

**Please ask if you need this information in another language or format.**

RBFT Physiotherapy Department, July 2022. Next review due: July 2024

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