

Self-help and daily living **Splints for arthritis** of the wrist and hand

# **Splints for** arthritis of the wrist and hand

This booklet provides information and answers to your questions about splints.



# Splints for arthritis of the wrist and hand



Many people with arthritis wear wrist or hand splints to provide support to their joints. In this booklet we'll explain the different types of splint, how they're used and how to look after them.

At the back of this booklet you'll find a brief glossary of medical words – we've <u>underlined</u> these when they're first used in the booklet.

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# What are wrist and hand splints?

Wrist and hand splints are supports provided to people who need protection and support for painful, swollen or weak joints and their surrounding structures. Their designs make sure you position your wrist and hands correctly.

There are two types of hand or wrist splint:

- splints used for **resting** joints of the wrist and hand
- splints used to support work done by the hands.

These splints are sometimes used for conditions other than arthritis, such as carpal tunnel syndrome.

See Arthritis Research UK booklets
Carnal tunnel syndrome: Looking after

Carpal tunnel syndrome; Looking after your joints when you have arthritis; Pain and arthritis?

There are two common types of splint: resting splints and working splints.

# What are the differences between resting and working splints?

#### **Resting splints**

These splints support your joints when you're resting and can help to ease pain and <u>inflammation</u>. They can be useful if you have a painful flare-up of <u>rheumatoid arthritis</u> or a period of joint discomfort, when you may need to rest your hands for short spells during the day or night.

Resting splints are usually made from a moulded thermoplastic and are fitted with Velcro fastening straps (see Figure 1). They're normally custom-made by your physiotherapist, occupational therapist or orthotist.

**1** See Arthritis Research UK booklets

Meet the rheumatology team; Occupational therapy and arthritis; Physiotherapy and arthritis; Rheumatoid arthritis

#### **Working splints**

Working splints support your wrist and hand joints while you're using your hands. They can be worn when you carry out daily tasks and should make the job less painful. They can also help by keeping your wrist joint in an efficient position when doing a job and may help to make your wrist and hand feel stronger. However, because these splints support your wrist and hand firmly they may also make these joints feel a little less flexible.

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Working splints are usually made of an elastic or light synthetic rubber-type fabric (e.g. neoprene) with Velcro straps. They're available commercially or from physiotherapy or occupational therapy departments.

**See Arthritis Research UK booklets**Work and arthritis; Work-related
joint disorders.

#### **Resting splints**

#### Why should I wear a resting splint?

You may find that a resting splint:

- reduces wrist and hand pain
- rests and supports your wrist and hand in the correct position
- helps to reduce swelling and morning stiffness.

#### When should I wear a resting splint?

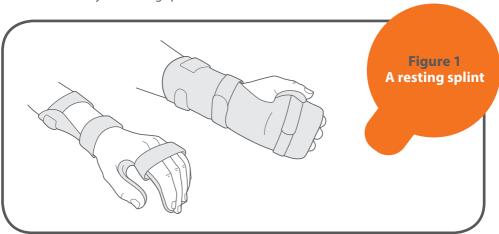
You should wear your resting splint:

- overnight or occasionally during the day when resting
- during flare-ups or when you have painful joints
- as advised by your therapist.

#### How to put it on

- 1. Undo the straps.
- 2. Place your hand into the splint so that it's in contact with the palm of your hand and there's no space between your wrist and the splint.
- 3. If there's a thumb section make sure that your thumb is also in contact with the material.
- 4. Do up the straps not too tight starting with the strap nearest your elbow.

You may find it helpful to leave the strap over the fingers done up so that you can slide your hand in or out. This means there's one less strap to undo.



#### **Working splints**

#### Why should I wear a working splint?

You may find that a working splint:

- gives your wrist or thumb support while carrying out activities that would normally be painful
- makes jobs easier to manage
- increases your grip strength
- helps protect and support your wrist or thumb
- helps reduce or prevent wrist or thumb pain.

#### When should I wear a working splint?

You should wear your working splint:

- during activities that cause you pain
- when your wrist or thumb is swollen
- when your wrist or thumb feels weak
- when you're experiencing more discomfort than usual
- as advised by your therapist.
- We don't recommend that you wear your splints continuously during the day, as this can cause the muscles that support your joints to weaken.



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#### **Wrist working splint**

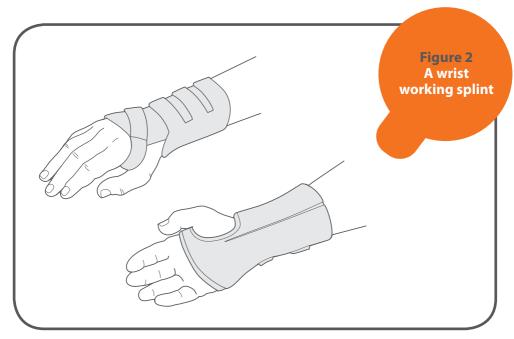
This is a wrap-around splint that has a metal bar inserted in a pocket on the palm side of your wrist. This helps to stabilise your wrist joint in a comfortable and efficient position (see Figure 2).

#### How to put it on

- 1. Undo the straps.
- 2. Place your hand into the splint so that the supporting metal bar is fitting closely into your palm.
- 3. Roughly line up the edges.
- 4. Do up the straps not too tight this time starting with the strap nearest your wrist, as this is the narrowest part. (If you start with the strap nearest your

Your splint shouldn't cause pain or numbness in your hand when you wear it.

elbow it tends to push the splint down and restrict movement at your fingers. This isn't the case for resting splints, which you fasten from your elbow first).



#### Wrist wrap working splint

This is a wrap-around splint that gives light support to your wrist (see Figure 3).

#### How to put it on

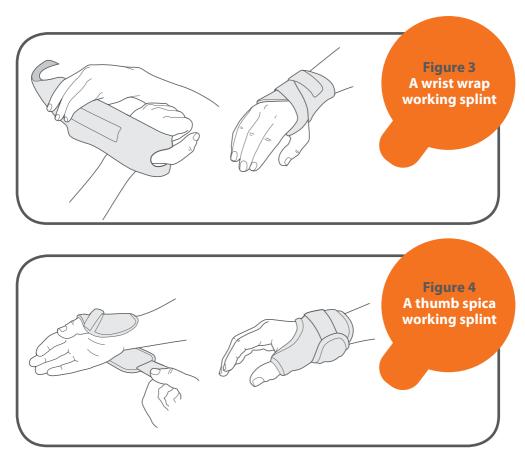
- 1. Place the loop over your thumb.
- 2. Take the long section of the support round the back of your wrist and wrap around, pulling slightly.
- 3. Do up the strap.

#### Thumb spica working splint

This is a wrap-around splint that goes around your thumb and wrist. Some have an extra support for the thumb joints. This helps to stabilise the thumb (see Figure 4).

#### How to put it on

- 1. Undo the straps.
- 2. Place the reinforced strip on top of your thumb joints.
- 3. Do up the straps not too tight.



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# How should I care for my hand if I wear a splint?

The following tips will help you care for your hand if you wear a splint:

- Check your skin regularly for any signs of redness or soreness – if your skin is sore when you wear your splint then contact your rheumatology department or the department that issued the splint. It may be that you're allergic to the material of the splint, or that it's rubbing and causing too much pressure on your skin.
- Don't wear your splint all the time, otherwise your joints may become stiff.
- Don't wear your working splint overnight unless you've been told to by your therapist or nurse.

- When you take the splint off, make sure that you do some gentle wrist, finger and thumb exercises to help stop your joints from stiffening up.
- **See Arthritis Research UK booklet** *Keep moving.*
- Stop wearing your splint if it:
  - rubs or causes pain
  - doesn't fit any more or is worn out
  - leaves red marks or makes your fingers tingle.



# How should I care for my splint?

#### **Resting splints**

Clean your resting splint by wiping it with a damp cloth. You may use warm, soapy water or a mild detergent. Use a towel to dry it and don't store it on a sunny window sill or near a radiator.

#### **Working splints**

When carrying out some activities wear cotton or rubber gloves over the splint to help prevent it from getting dirty or wet, for example when gardening or cleaning.

If the splint contains a metal bar you should remove it (if possible) before the splint is washed. Check the position

You shouldn't borrow or use other people's splints (or let them use yours) as they won't have been designed to suit your own needs.

of the bar and be careful to replace it in the same position after washing the splint.

Working splints can be handwashed in warm soapy water and then air-dried. Some splints can be washed in a washing machine, but you should check the label. It's a good idea to place the splint in a pillowcase first to prevent the Velcro attaching to other washing.

#### How can I get a splint?

#### **Resting splints**

Most rheumatology departments will have members of the team who can make these splints for you, including physiotherapists, occupational therapists and orthotists. Resting splints are also sometimes available from mail-order catalogues and online.

#### **Working splints**

Most rheumatology departments and occupational therapy or physiotherapy departments working with a rheumatology service will stock working splints.

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They're also sometimes available from hospital <u>orthopaedic</u> departments and GP practices, and they can be purchased from some surgical suppliers, pharmacies, sports shops, mobility equipment shops, mail-order catalogues and online.

We don't recommend that you buy splints yourself unless you've received advice from your rheumatology team, so you can be sure a splint purchased through mail order or online is appropriate and effective for you.

# What else should I know about wrist and hand splints?

If you want to wear any type of working splint while driving, contact your insurance company first for advice about whether your cover will be affected.

For further information contact a member of your rheumatology team or of the department that supplied the splint.

See Arthritis Research UK booklet Everyday living and arthritis.



#### **Glossary**

**Inflammation** – a normal reaction to injury or infection of living tissues. The flow of blood increases, resulting in heat and redness in the affected tissues, and fluid and cells leak into the tissue, causing swelling.

**Occupational therapist** – a trained specialist who helps you to get on with your daily activities including work (e.g. dressing, eating, bathing) by giving practical advice on aids, appliances and altering your technique.

**Orthopaedics** – a branch of surgery dealing with bone and joint problems, including treatments such as joint replacements and setting of broken bones.

**Orthotist** – a trained specialist who prescribes and fits special shoes and appliances (orthoses). The orthoses most commonly used by an orthotist in treating arthritis are special shoes or insoles for problems in the feet and legs, and splints for the hands and wrists.

**Physiotherapist** – a trained specialist who helps to keep your joints and muscles moving, helps ease pain and keeps you mobile.

Rheumatoid arthritis – a common inflammatory disease affecting the joints, particularly the lining of the joint. It most commonly starts in the smaller joints in a symmetrical pattern – that is, for example, in both hands or both wrists at once.

# Where can I get more information?

If you've found this information useful you might be interested in these other titles from our range:

#### **Conditions**

- Carpal tunnel syndrome
- Rheumatoid arthritis
- What is arthritis?

#### Self-help and daily living

- Everyday living and arthritis
- Keep moving
- Looking after your joints when you have arthritis
- Meet the rheumatology team
- Pain and arthritis
- Work and arthritis
- Work-related joint disorders

#### **Therapies**

- Occupational therapy and arthritis
- Physiotherapy and arthritis

You can download all of our booklets and leaflets from our website or order them by contacting:

#### **Arthritis Research UK**

PO Box 177 Chesterfield Derbyshire S41 7TQ Phone: 0300 790 0400

www.arthritisresearchuk.org

#### **Arthritis Research UK**

#### **Related organisations**

The following organisations may be able to provide additional advice and information:

#### **Arthritis Care**

18 Stephenson Way London NW1 2HD Phone: 020 7380 6500 Helpline: 0808 800 4050

www.arthritiscare.org.uk

Offers self-help support, a helpline service (on both numbers above), and a range of leaflets on arthritis.

#### **Chartered Society of Physiotherapists**

14 Bedford Row London WC1R 4ED Phone: 020 7306 6666 www.csp.org.uk



### We're here to help

Arthritis Research UK is the charity leading the fight against arthritis.

We're the UK's fourth largest medical research charity and fund scientific and medical research into all types of arthritis and musculoskeletal conditions.

We're working to take the pain away for sufferers with all forms of arthritis and helping people to remain active. We'll do this by funding high-quality research, providing information and campaigning.

Everything we do is underpinned by research.

We publish over 60 information booklets which help people affected by arthritis to understand more about the condition, its treatment, therapies and how to help themselves.

We also produce a range of separate leaflets on many of the drugs used for arthritis and related conditions. We recommend that you read the relevant leaflet for more detailed information about your medication.

Please also let us know if you'd like to receive our quarterly magazine, Arthritis Today, which keeps you up to date with current research and education news, highlighting key projects that we're funding and giving insight into the latest treatment and self-help available.

We often feature case studies and have regular columns for questions and answers, as well as readers' hints and tips for managing arthritis.

## Tell us what you think of our booklet

Please send your views to: feedback@arthritisresearchuk.org or write to us at: Arthritis Research UK, PO Box 177, Chesterfield, Derbyshire S41 7TQ.

A team of people contributed to this booklet. The original text was written by Christine Duncan, who has expertise in the subject. It was assessed at draft stage by specialist rheumatology nurse Sarah Bartholomew, occupational therapist Debbie Fletcher and rheumatology occupational therapist Louise Hollister. An **Arthritis Research UK** editor revised the text to make it easy to read and a non-medical panel, including interested societies, checked it for understanding. An **Arthritis Research UK** medical advisor, Angela Jacklin, is responsible for the content overall.



## **Get involved**

You can help to take the pain away from millions of people in the UK by:

- Volunteering
- Supporting our campaigns
- Taking part in a fundraising event
- Making a donation
- Asking your company to support us
- Buying gifts from our catalogue

To get more **actively involved**, please call us **0300 790 0400** or e-mail us at enquiries@arthritisresearchuk.org

#### Or go to:

www.arthritisresearchuk.org

Providing answers today and tomorrow



Providing answers today and tomorrow

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calls charged at standard rate

#### www.arthritisresearchuk.org

