

# Making a decision about carpal tunnel syndrome (CTS)

## What is this document?

This document is called a decision aid. It is designed to help you decide between treatment options. You should go through it and talk to your healthcare professional.

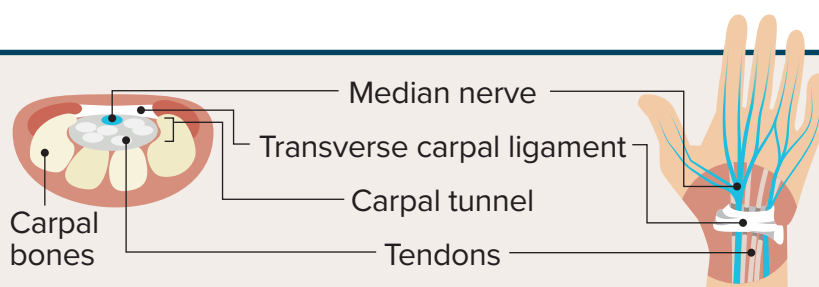
**Pages 1 – 6** should help you make a decision

**Pages 7 – 8** have extra information

This decision aid is for you if you have been told by a healthcare professional that you have **carpal tunnel syndrome (CTS)** and are having **symptoms**.

## What is CTS?

CTS is when there is pressure on a nerve in your wrist. The carpal tunnel is made up of bones at the bottom and a ligament at the top. Pressure inside the carpal tunnel causes symptoms.



## What level of symptoms do you have?

**Mild** – Your **symptoms come and go**, but don't get worse. They include pain, pins and needles or clumsiness. They are often worse at night. ● ○ ○

**Moderate** – Your symptoms are the same as those for mild but are **getting worse** and affecting your work or activities. ● ● ○

**Severe** – You feel **symptoms almost all the time**. They include pain, pins and needles, clumsiness or numbness. Your thumb feels weak or you have difficulty gripping. ● ● ●

Your healthcare professional might want to do tests to understand how severe your symptoms are. **If you have severe symptoms and leave them untreated it can lead to irreversible nerve damage. This means you may have permanent numbness, pain, weakness or clumsiness.**

## Your treatment options

Do nothing



Hand exercises and/or splints



Medicine (painkillers) or injection



Surgery



Thinking about how your symptoms are affecting you, and how long you have had them, will help you decide which option is right for you.

## 2 CTS treatment options

There are different ways to treat carpal tunnel syndrome. We'll show you different options here. **You can try more than one at the same time.**

If your symptoms are **mild or moderate**, your healthcare professional may suggest one or more of these options. If your symptoms aren't improving after 6 – 12 weeks of trying these treatments, you should contact your healthcare professional. They will be able to talk to you about other options.

### Do nothing



**Mild CTS often gets better without any treatment.**

**You are more likely to get better without treatment if:**

- you are under 30 years old
- you are pregnant (CTS often gets better after you give birth)
- you haven't had symptoms for very long

### Stopping activities, trying hand exercises and using a wrist splint



**Stopping or reducing activities that could be causing CTS**

- These are usually activities where you bend your wrist, grip something hard, or use vibrating tools, like playing an instrument or using work tools.
- If this option works for you, you can start doing the activities again once you feel better. Start doing them gradually and stop if you feel symptoms return.

**Trying hand exercises**

- You can choose to see a physiotherapist or occupational therapist for **treatment**.
- If this option works for you, your symptoms **should improve in about 4 weeks**.
- A hand splint may be useful during aggravating activities during the day as well as managing symptoms at night.

**Using a wrist splint**

- You can wear a splint overnight to keep your wrist straight and relieve pressure on the nerve. They can be helpful if your symptoms are bad at night.
- You can buy a splint online or from a pharmacy.
- If this option works for you, your symptoms **should start to improve within a few nights**.
- Once you start to feel better you can gradually reduce the amount of time you wear the splint.

### Medicine (painkillers) or injection



Take **painkillers** like paracetamol or NSAIDs (non-steroidal anti-inflammatory drugs) like aspirin or ibuprofen

- These may help manage CTS pain in the short-term.
- If these work for you they should ease your pain within **an hour**.

A healthcare professional can **inject steroids** (corticosteroids)

- This may reduce the swelling inside your wrist and ease your CTS symptoms.
- If this option works for you it should ease your symptoms within **2 weeks**.

## 3 CTS treatment options

### Surgery



#### Carpal tunnel release surgery is usually an option if:

- you have tried other options for 6 – 12 weeks and your symptoms haven't improved
- you have severe symptoms or have had symptoms for a long time
- tests show you have nerve damage or muscle wastage.

A healthcare professional will numb your hand and wrist with a local anaesthetic. They will then make a small cut in the palm of your hand and cut the ligament to relieve pressure on your nerve.

Surgery usually takes about 20 minutes. You don't need to stay in hospital overnight.

Surgery usually **improves symptoms straight away**. The wound should heal fully in 3 – 4 weeks. You may have a sensitive scar for several months. **Full recovery may take weeks or months.**

Carpal tunnel release surgery is sometimes carried out as keyhole surgery but this is not common in the UK.

**Surgery may not improve your symptoms if you wait too long, or already have severe nerve damage, constant numbness or loss of muscle.**

#### Recovery from carpal tunnel release surgery

##### Driving

You may not be able to drive safely for 1 to 2 weeks after surgery due to pain and weakness in your hand. **It is your responsibility to decide when you are safe to drive as it may affect your car insurance.** You can talk to your healthcare professional about this if you are unsure.

##### Returning to work

How long it will take before you return to work depends on you and your job. People take different times to heal, but you should be able to return to:

- desk-based work (keyboard or telephone) between 1 – 2 weeks
- light manual roles (delivery or driving) between 2 – 4 weeks
- heavy manual roles (construction) between 4 – 8 weeks.

Open carpal tunnel release is one of the **most common hand surgeries** in the UK. Around **53,000** operations are carried out every year.

## 4 What's important to you?

Your personal feelings are an important part of making a decision. Think about what matters most to you in this decision. On each question below, consider your answer and put a mark in the scale and you can then talk the answers through with your healthcare professional.

Put an 'X' where it applies to you

Yes/a lot ← | → No/not at all

I have had symptoms for a long time (between 3 and 12 months)

I feel my symptoms almost all the time

My symptoms have been getting worse

My symptoms are starting to affect my work or activities

My symptoms are affecting my sleep

I have tried splints or hand exercises and they haven't helped

I have tried medicine or injections and they haven't helped

I have had tests which show nerve damage or muscle wastage

I would be able to get time off work for surgery

Use this space to fill in any of your own thoughts:

If you've mainly marked **no**: doing nothing or non-surgical treatments may be good options.

If you've mainly marked **yes**: you might want to think about surgery.

Surgery may not improve your symptoms if you already have severe nerve damage, constant numbness or loss of muscle.

# 5 Potential benefits of options

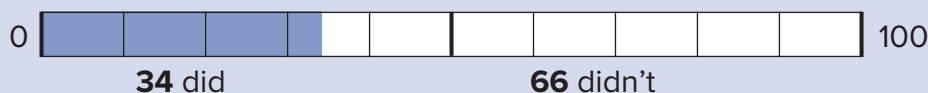
The numbers on this page are taken from research studies. You can find links to these studies on [page 7](#).

## How many people felt better after 1 year? (Out of **100** people)

### Do nothing



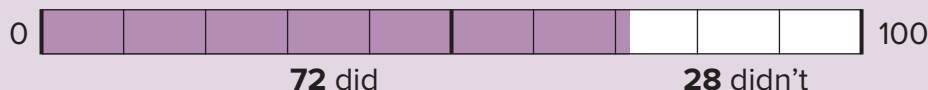
**34** people felt better (within 6 months of diagnosis) by **doing nothing**. **66** didn't.



### Hand exercises or splints



**72** people felt better by **using a wrist splint**. **28** didn't.



We **don't have data** for stopping / reducing activities or trying hand exercises.

### Medicine (painkillers) or injection



**70** people felt better by **having a steroid injection**. **30** didn't.



We **don't have data** for taking painkillers.

### Surgery



**75 to 92** people felt better after **having surgery**. **8 to 25** didn't.



# 6 Potential risks of options

## Do nothing



If you do nothing and your symptoms don't improve, they may continue to get worse.

## Hand exercises and/or splints



If hand exercises or using a wrist splint doesn't work for you, your symptoms may continue to get worse.

## Medicine (painkillers) or injection

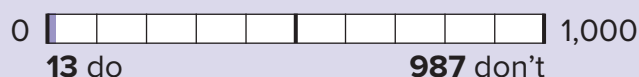


### Painkillers and non-steroidal anti-inflammatory drugs (NSAIDs)

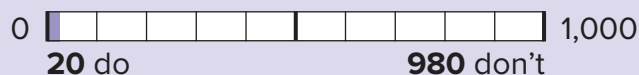
Taking NSAIDs for long periods of time (months or years) can increase your risk of ulcers or bleeding in the stomach, kidney damage, heart attacks and strokes. Your healthcare professional can give you tablets to protect your stomach. Talk to your healthcare professional to make sure you're okay to take these medicines.

### What are the risks of corticosteroid injections? (Out of every 1,000 people)

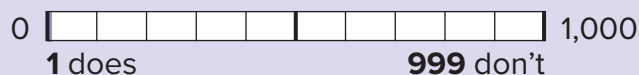
**13** people find the injection painful for up to 3 weeks after. **987** don't.



**20** people have a **change of skin colour** at the injection site (may last weeks, months or be permanent). **980** don't.



**1** person has **long-term damage to nerves** causing permanent pain and numbness. **999** don't.

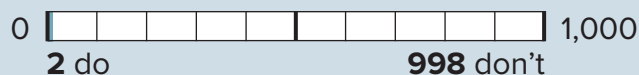


## Surgery

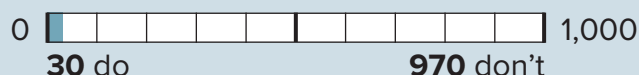


### What are the risks of carpal tunnel release surgery? (Out of every 1,000 people)

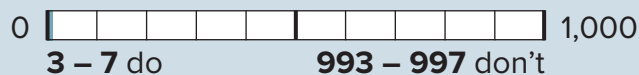
**2** people have **permanent damage to nerves**. **998** don't.



**30** people need to have a **2nd operation**. **970** don't.



**3 to 7** people **get an infection**. **993 to 997** don't.



You may have **long term swelling, pain**, or a **stiff hand** after surgery but we don't currently have numbers for this.

# 7 More information

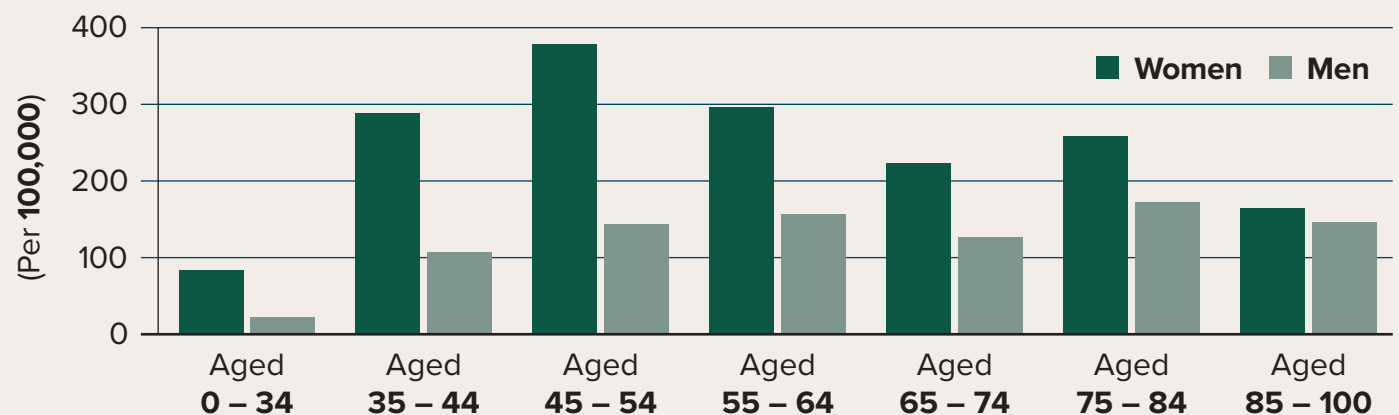
## Who is at risk of carpal tunnel syndrome?

You are more at risk of getting CTS if you:

- are **pregnant**
- are **overweight**
- have **injured your wrist in the past**
- have a **close relative with the condition**
- have other medical conditions like **rheumatoid arthritis** or **diabetes**
- have a job or hobbies in which you **bend your wrist** or **have to grip hard**.

## When does carpal tunnel syndrome develop?

You can get CTS at any age. It is most common in **women aged 45 – 54** and **men aged 75 – 84**.



**How many people in the general population have carpal tunnel syndrome? And how many have surgery?**

**Between 3 – 5** people out of **1,000** have CTS.

Around **1 person out of 1,000** will have surgery for CTS.

## Where can I go for more information?

**NHS:** <https://www.nhs.uk/conditions/carpal-tunnel-syndrome/>

**More information on carpal tunnel syndrome:** <https://www.carpal-tunnel.net>

**Patient Info:** <https://patient.info/bones-joints-muscles/carpal-tunnel-syndrome-leaflet>

### Where did we get our numbers from?:

- Data on doing nothing, from a study with 257 patients: [www.doi.org/10.1142/S0218810497000215](http://www.doi.org/10.1142/S0218810497000215)
- Data on splinting and open carpal tunnel release surgery, from a clinical trial (RCT) of 176 patients: [www.doi.org/10.1001/jama.288.10.1245](http://www.doi.org/10.1001/jama.288.10.1245)
- Data on open carpal tunnel release surgery and steroid injections, from RCT of 101 patients: [www.doi.org/10.1002/art.20767](http://www.doi.org/10.1002/art.20767)
- Data about steroid injection depigmentation and pain, from a study with 482 people: [www.doi.org/10.1177%2F1753193417734426](http://www.doi.org/10.1177%2F1753193417734426)
- Risk of nerve damage from steroid injection, from InformedHealth.org [www.ncbi.nlm.nih.gov/books/NBK279598/](http://www.ncbi.nlm.nih.gov/books/NBK279598/)
- Data about risk of damage to nerves from a study with 1203 patients: [www.doi.org/10.1016/S0266-7681%2899%2990009-8](http://www.doi.org/10.1016/S0266-7681%2899%2990009-8)
- Data about risk of re-operation, from a study of 855,832 operations: [https://doi.org/10.1016/S2665-9913\(20\)30238-1](https://doi.org/10.1016/S2665-9913(20)30238-1)
- Data about carpal tunnel release infection, from a study with 450,000 patients (lower estimate) and 917 patients (higher estimate): [www.doi.org/10.1308/rcsann.2019.0036](http://www.doi.org/10.1308/rcsann.2019.0036) Page 6
- Data about prevalence of CTS, from a study of 2466 people: [www.doi.org/10.1001/jama.282.2.153](http://www.doi.org/10.1001/jama.282.2.153)
- Data about the age CTS develops, from a study of 253 general practices: [www.doi.org/10.1136/jnnp.2005.066696](http://www.doi.org/10.1136/jnnp.2005.066696)
- Data about how many people have surgery for CTS, from a research article: [www.doi.org/10.1054%2Fjhsb.1999.0328](http://www.doi.org/10.1054%2Fjhsb.1999.0328)

Data about number of annual operations – Hospital Episode Statistics, Admitted Patient Care, 2011-12:

<https://digital.nhs.uk/data-and-information/publications/statistical/hospital-admitted-patient-care-activity/hospital-episode-statistics-admitted-patient-care-england-2011-12#highlights>

## 8 Next steps

Once you have worked through this information you can use this space to write any questions you would like to discuss with your healthcare professional. Bring this document to your next appointment.

### Contacts

Name of doctor, nurse or specialist

What are their contact details

Contact details of hospital transport (if applicable)

### Next steps

What will happen to me next? (treatments / tests?)

When will these happen?

When will I be reviewed next?

What decision do I need to make today? Or when do I need to make a decision?

### Questions for your specialist

These can be about any concerns you may have, for example what you hope for from your treatment decision

**Produced by:**

Winton Centre for Risk and Evidence Communication and NHS England

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Conflicts of Interest – None declared

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This decision aid was created with input from patients and healthcare professionals.