

# Preventing Carpal Tunnel Syndrome



**Reducing Your Risk**

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Neurology

# What Is Carpal Tunnel Syndrome?



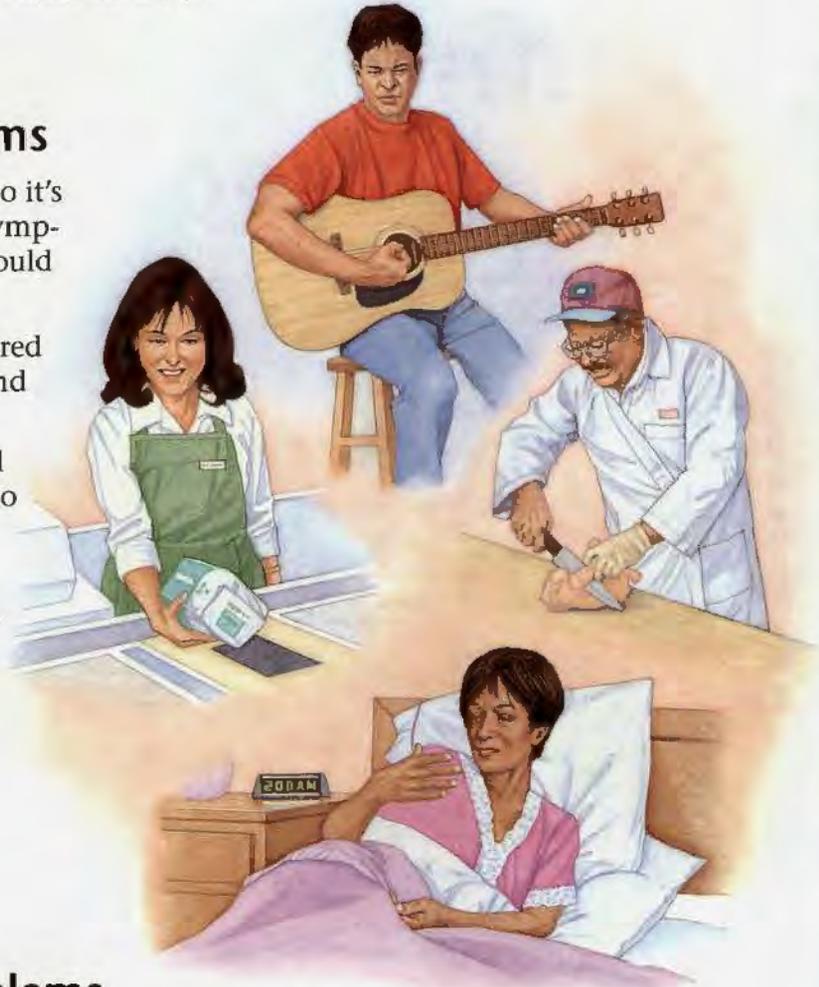
Carpal tunnel syndrome (CTS) is a painful condition that limits the use of your hands. Awkward and repeated hand and wrist movements may place you at risk. But CTS can be prevented. This booklet will help you spot symptoms early. And it will show you ways to control and reduce your risk of CTS.

## Know Early Symptoms

If untreated, CTS can progress. So it's vital that you know the early symptoms of CTS and realize they should not be ignored. As CTS begins:

- One or both hands may feel tired and tender. They may ache and throb, or feel cold.
- Your hands may tingle or feel numb at night, causing you to wake up.

If early symptoms are ignored, tingling and pain often increase. You may feel numbness. You may notice yourself dropping things. Over time, lasting nerve damage may occur.



## Prevent Lasting Problems

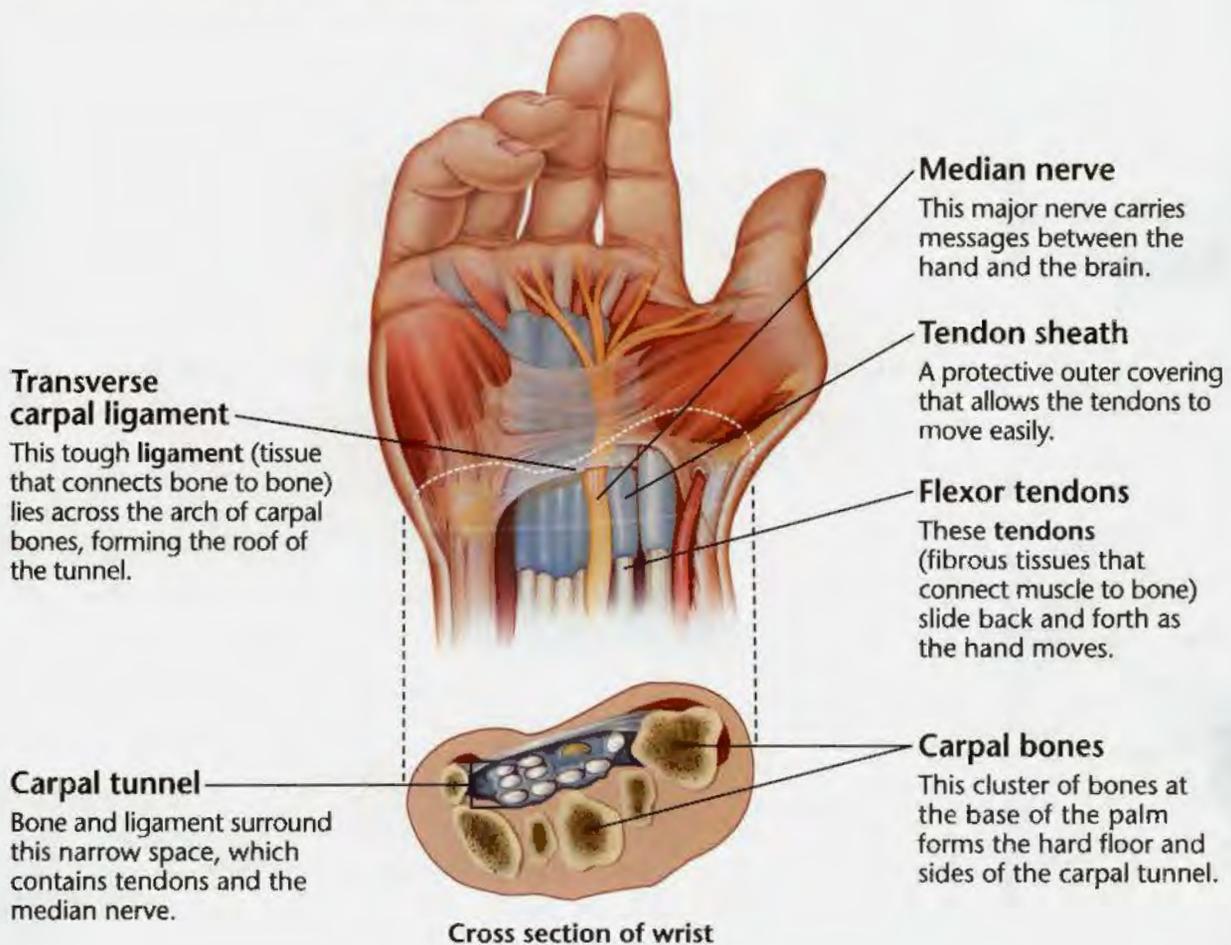
If you notice any symptoms of CTS, don't wait to seek help. It may have taken many months for these problems to appear. And it could take just as long for your body to heal. But you can take steps, at home and on the job, to reduce your risk. By acting early, you can control symptoms sooner and help prevent long-term nerve damage.

This booklet is not intended as a substitute for professional medical care. Only your doctor can diagnose and treat a medical problem.

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## What Is the Carpal Tunnel?

The carpal tunnel is a narrow space inside the wrist. This space allows the flexor tendons and the median nerve to run from the wrist into the hand. Knowing what the carpal tunnel is will help you understand CTS.



## What Causes Symptoms of CTS?

Awkward and repeated hand and wrist movements may cause the sheaths of the flexor tendons to swell. This swelling takes up more space in the carpal tunnel. Because the tunnel is surrounded by bone and ligament, there is no space for the swollen sheaths to expand. Instead, they press against the median nerve, causing symptoms. Swelling due to bone fracture, arthritis, diabetes, or pregnancy also can cause CTS symptoms.

# Are You at Risk?



Learn some of the major factors that increase your risk of CTS. This way, you can take steps to prevent CTS or control any symptoms you may have. Read the questions below and check all the boxes that apply to you.

## Ask yourself these questions:



- Do I feel pain in my hands and wrists each day?*  
It's normal to feel sore after working too hard. But working in pain each day increases your risk of CTS.



- Are my hand and wrist movements more limited than usual?*  
This type of limited movement can be caused by tingling and pain in your hands and wrists.



- Do I key with my wrists bent backward while at a computer?*  
Moving your fingers with your wrists bent backward produces more pressure on the carpal tunnel.



- Do I use my hand as a tool?*  
Not using tools made for the task puts extra pressure on your hands and wrists.



- Do I forget to take breaks while working?*  
If you move your hands and wrists in the same way for a long time, you are at greater risk of CTS.



- Am I under stress?*  
When under stress, the body tires faster.

*The more boxes you check, the greater your risk of CTS.*

# Practice Prevention: Reduce Risk

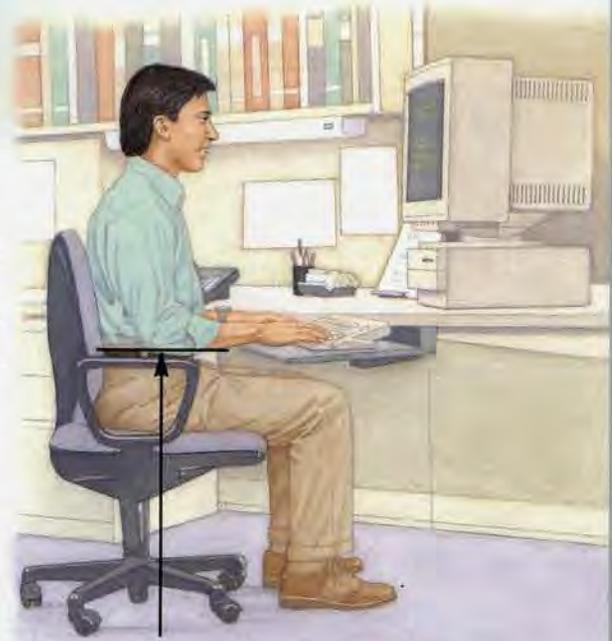


Preventing CTS requires that you be aware of how you use your hands at all times. Use safe working posture and find ways to give your body a rest. Even small changes can help.

## Safe Working Posture

Whether you're sitting or standing, at home or at work, try to use safe body posture.

- Keep your wrists in a **neutral** (straight) position. Your forearms should stay level with the floor.
- To maintain a neutral wrist, measure the distance from the floor to your elbow. Then adjust your work surface to match this height.
- If you can't adjust a standing work surface, raise your body. Stand on a stool. If you sit, raise the chair height and support your feet. That way, your hips and knees stay level with each other.



Measure the distance from the floor to your elbow. Then adjust your work surface to match this height.

## Ways to Give Your Body a Rest

At work and at home, give your hands and body a break. Allow them to rest. You'll be in better shape to produce more.

- Take frequent breaks, even if they are as short as 30 seconds. Avoid repeated, nonstop movements when you can.
- Rotate tasks throughout the day. Switch between fine finger movements and movements that use your whole body. For instance, go from keying to getting up to use the copier.
- Move more. Shift your weight, stand up, and stretch.

### Useful Tips:

- Do you spend a lot of time with your hand bent, holding a phone receiver? If you do, try using a speaker phone or a headset.
- Slide cushioned grippers over your pencils and pens. This reduces the amount of force and tension in your hand when writing.

# Smart Moves



Reduce your risk of CTS in healthy ways. Exercise can strengthen muscles and improve blood flow. It can also help you move your hands and wrists more freely. As an added bonus, exercise gives you a break from tasks throughout the day.

## Exercise

Move into comfort by doing simple exercises right in your workspace. Start with the two shown below. They'll help loosen up your muscles. In fact, you may be surprised by the change in how you work and feel.

### Full-Body Stretch



**Step 1:**  
Stand with legs shoulder width apart. Your arms should be at your sides, with both shoulders relaxed.

**Step 2:**  
Bend your wrists up and move your arms away from your body until you feel a gentle stretch.

To increase the stretch, move your arms behind your body.

### Finger Grip and Release



**Step 1:**  
Make a fist with your hand (or grasp a sponge or small ball). Hold for 3 seconds. Then relax.



**Step 2:**  
Spread your fingers apart as far as you can. Hold for 3 seconds. Then relax.

Repeat both steps 5 times.

## Keep Fit

When you're fit, your blood supply is able to feed your body. This helps tired or damaged tissues renew themselves faster.

- Try to do some form of brisk activity for at least 30 minutes daily.
- Do strength training, such as using weights or squeezing flexible balls.
- Take walks often. Walking relaxes the body and improves blood flow.

# Ways to Relieve Minor Symptoms

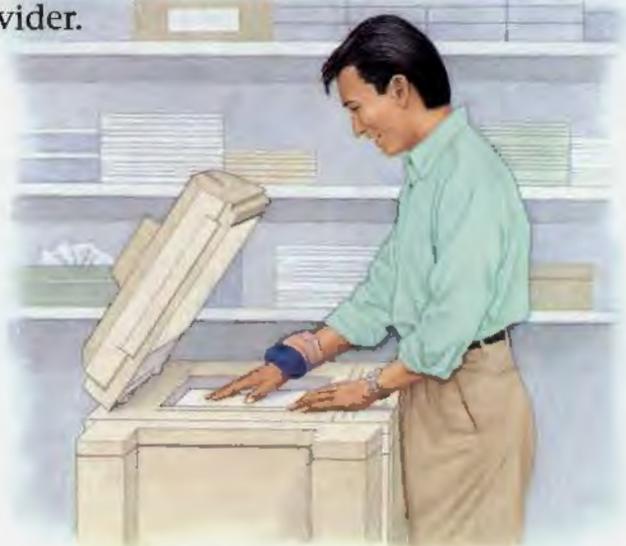


The tips below can help relieve minor symptoms of CTS. But they won't solve the cause of your problem. To stop ongoing symptoms, you'll need to change poor habits. You may also need to see your health care provider.

## Ice and Heat

Both ice and heat can help relieve pain. Use the method that works best for you.

- Wrap a bag of frozen peas or an ice pack in a thin cloth. Then apply to the wrist for 15 minutes.
- Rub a large piece of ice right on the wrist. Rub for 2 minutes or until the skin is cherry red.
- Wrap warm, wet towels around the wrist.



You can remain active by wrapping an ice pack on your wrist.

## Massage

Up to 5 minutes of massage is a soothing way to increase blood flow and relax tight muscles. Always massage up the arm. This pushes fluid back toward the heart.



During massage, support the forearm at an angle. Using the side of the hand, gently push from the fingers up the forearm.

## Medications

Common medications, such as aspirin or ibuprofen, can help reduce pain and swelling. But if you are using pills each day to control symptoms, it's time to call your health care provider.

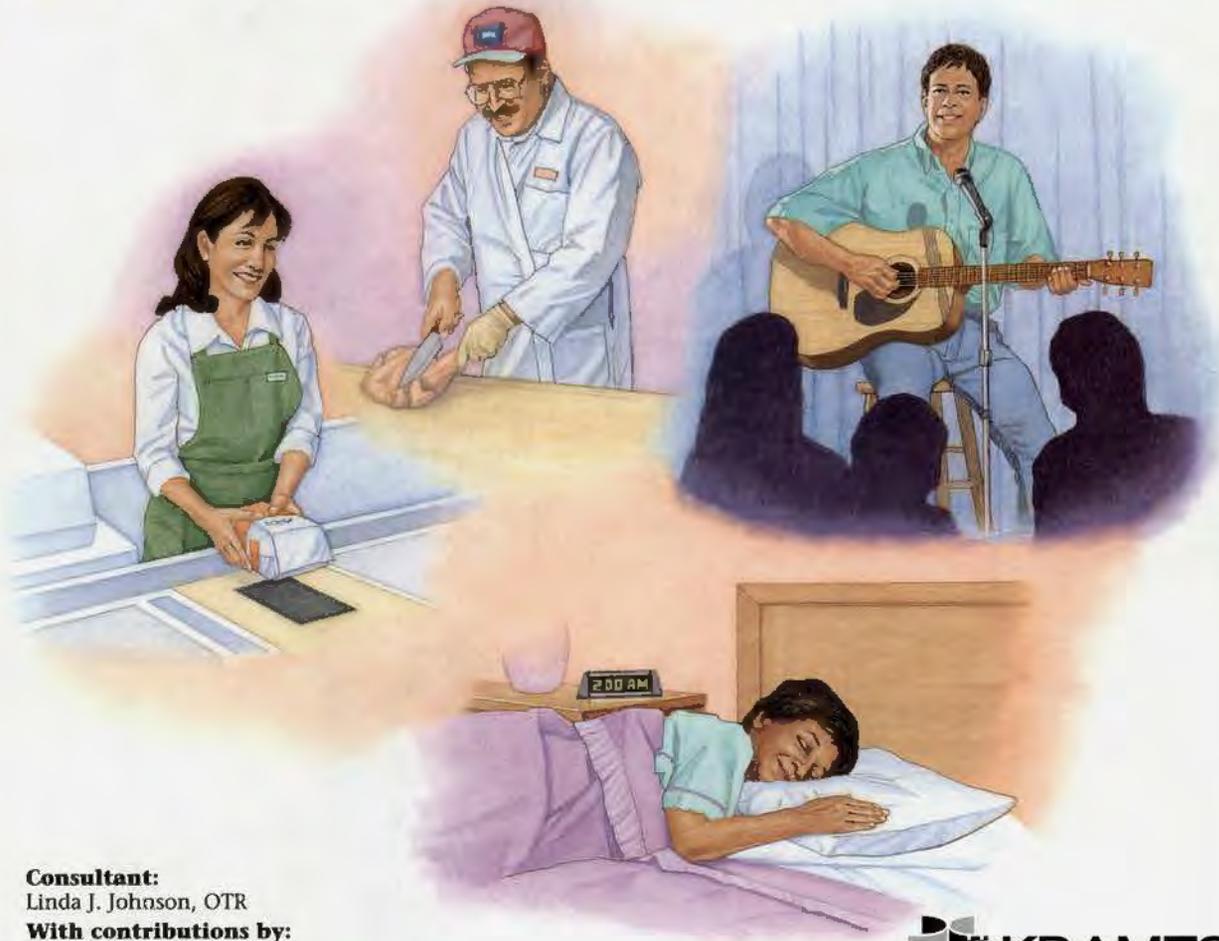
## Know When to Seek Help

- Talk with your employer about ways to work more safely. If you have health and safety services at work, use them as a resource.
- See your health care provider if you have symptoms. Hand and wrist symptoms can be caused by problems other than CTS.
- Consult your health care provider before using rigid splints. They can be harmful if they're not used right.

# Keeping Your Wrists Healthy



Listen to your body and know the early symptoms of CTS. On the job and at home, use safe postures and take frequent breaks. Exercise often. And talk to your employer about safer ways to do your job. You'll feel better and work better, too. You'll also help prevent carpal tunnel syndrome.



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