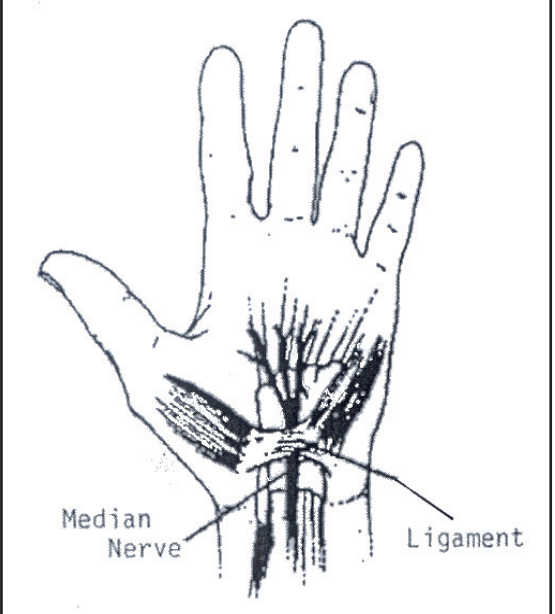


# Carpal Tunnel Syndrome

## What is Carpal Tunnel Syndrome (CTS)?

Carpal Tunnel Syndrome is a condition that affects the hand and wrist. The carpal tunnel is a space that runs through the wrist. It is surrounded by the wrist bones which are linked together by a thick, stiff ligament.

The tendons that allow the fingers to move back and forth run through the carpal tunnel. A major nerve in the arm called the Median nerve also runs through the carpal tunnel. The median nerve carries signals from the brain to control the movements of the hands and fingers. It also carries signals from the hand to the brain about temperature, pain and touch.



Swelling of the tendons of the fingers reduces space in the tunnel and puts pressure on the Median nerve. This pressure can injure the nerve and result in carpal tunnel syndrome.

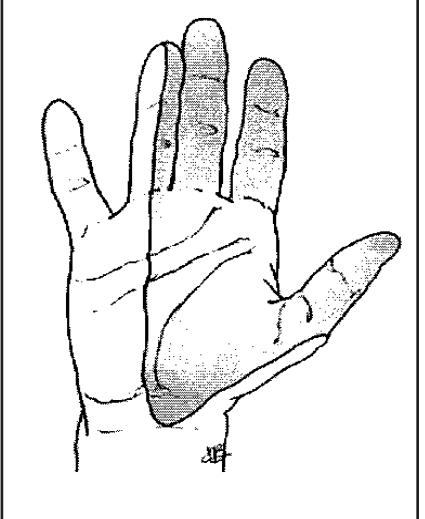
## What are the signs and symptoms of Carpal Tunnel Syndrome?

Carpal Tunnel Syndrome causes numbness, tingling and pain of your thumb and your index, middle, and ring fingers. At first these symptoms may come on with activity and go away with rest. Later the symptoms are present all the time .

Symptoms are worst at night and may wake you up. It may seem that your whole hand and all the fingers are affected. Your hand may be weak or clumsy, you may drop objects and have difficulty with tasks such as doing up buttons. Your sense of touch may be reduced in the affected area. In advanced cases your nerve may be permanently damaged.

## What causes Carpal Tunnel Syndrome?

In the work environment Carpal Tunnel Syndrome results from rapid, repetitive use of the hand and fingers for many hours at a time, on a daily basis. The problem is made worse when working with a bent wrist or having to use force. Working with vibrating tools in a cold environment is another risk factor. Other risk factors include using the palm of the hand as a hammer or continuous pinch gripping.



Areas of Pain and Numbness

Other conditions, not related to work, can also cause Carpal Tunnel Syndrome. For example, diabetes and pregnancy cause fluid to build up and collect inside the carpal tunnel. This increases the pressure on the nerve and may also lead to injury.

### **Risk Factors for Carpal Tunnel Syndrome**

- repetitive hand movement
- awkward hand positions
- strong gripping
- direct pressure on the palm
- vibration

### **What occupations are at risk for Carpal Tunnel Syndrome?**

Cashiers, hairdressers, garment workers, bakers and meat processing workers are examples of occupations that involve repetitive wrist movements that may lead to Carpal Tunnel Syndrome.

### **What is the treatment for Carpal Tunnel Syndrome?**

It is very important to stop the activity that triggered the problem. A wrist brace may help by preventing movements of the wrist. This may interfere with work activity. Some people benefit by using the brace when they sleep. Rest, medication and the use of the brace may relieve symptoms, though they will recur if work practices are not changed.

If symptoms persist, surgery may be necessary to relieve the pressure on the Median nerve. Occasionally the operation may need to be repeated. In a number of instances symptoms persist despite surgery.

### **What should your employer do to prevent Carpal Tunnel Syndrome?**

- train workers on the risk factors and how to prevent Carpal Tunnel Syndrome
- design tools to reduce the need for forceful gripping or wrist bending
- make the workstation adjustable and reduce time spent working in awkward postures
- reduce the workload to slow the pace of work
- reduce vibration by insulating tools
- rotate jobs on a regular basis to minimize the repetitive use of the same muscles.
- provide workers with regular rest breaks

### **What should you do if you have signs or symptoms of Carpal Tunnel Syndrome?**

- report any pain or injury to your supervisor or employer
- see a doctor to correctly diagnose your injury
- if you have a workplace health & safety committee ask them to review this fact sheet. They may be able to identify risks and make recommendations to reduce the risk of developing Carpal Tunnel Syndrome at work.

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