



The carpal tunnel is a narrow passageway of bone and ligament in your wrist. The nerve that controls sensation in your fingers and some muscles in the hand passes through this tunnel. This tunnel also contains some of the tendons for your fingers. Motions that you do over and over using the hand or wrist may cause these finger tendons to become inflamed and press the nerve against the bone. This kind of pressure on the nerve can cause pain and numbness in the hand and fingers. This is known as carpal tunnel syndrome (CTS).

The symptoms of CTS include:

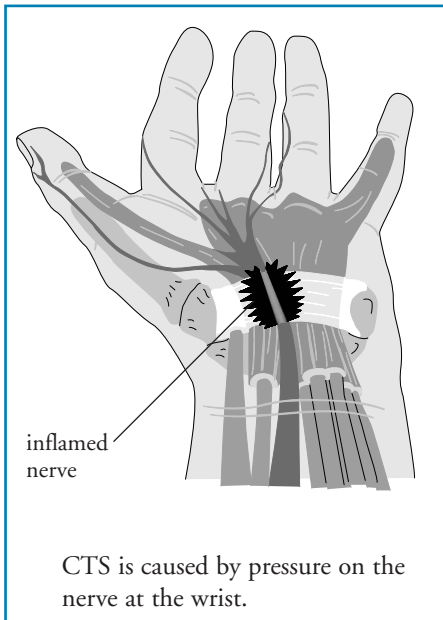
- Numbness or tingling in one or both hands that involves all but the little finger.
- Wrist pain that may affect your fingers and radiate up your arm.
- Hand or wrist pain that is often greater at night and early morning.

Carpal tunnel syndrome can be caused by anything that causes swelling against the nerve; for example, a cyst on the tendon or rheumatoid arthritis. Most often, CTS is caused by swelling of the finger tendons due to overuse

from repetitive finger and hand movements in a bent-wrist position. Pregnancy, diabetes, underactive thyroid, and birth control pills can increase the risk of CTS.

Prevention

- Avoid repetitive hand motions with a bent wrist. Keep wrist straight for these activities:
 - o Writing, drawing, painting, use of computer mouse or keyboard.
 - o Driving.
 - o Using power tools, pliers, or scissors.
 - o Playing piano or other musical instruments.
 - o Knitting, crocheting, needle-point.
- Take frequent breaks (at least five minutes each hour) from repetitive hand motions. Stretch your fingers and thumb and change your grip often.
- Learn to use your keyboard with a soft touch. Using a gel pad to support your wrists while you do computer work may also help.
- Maintain good posture. Avoid rounding your shoulders or slouching.



Home Treatment

- Don't ignore wrist pain. If possible, stop the activity that triggered the problem. If the pain decreases, resume the activity a little at a time, with a greater effort to keep your wrists straight.
- If you cannot stop the activity, try to change the way you do it so that your wrist is not stressed. Switch between different tasks so that you don't spend more than one to two hours doing an activity involving your hands.
- Gently warm up your hands before starting work. Do some wrist circles and stretch your fingers and wrists. Repeat these stretches every hour.
- Use a wrist rest pad with your computer keyboard to help maintain the straight alignment of your wrist, but don't lean on it continuously.
- Apply ice or a cold pack to the palm side of your wrist.
- Avoid sleeping on your hands and try to keep your wrists straight.
- A wrist splint that keeps your wrist straight may help reduce pain. Wear the splint at night and when lifting or doing activities that cause you pain. You can buy a splint in some pharmacies and in hospital supply stores.
- Some people find that 50 mg of vitamin B6 taken twice a day helps relieve wrist pain. (Talk with your doctor before taking B6.)
- Reducing the salt in your diet may help stop swelling in the wrist.
- Use medications such as ibuprofen (Advil) or acetaminophen (Tylenol) as needed for pain relief.

Call Kaiser Permanente if . . .

- You have severe pain or numbness that is not relieved by rest, changing positions, ice, or a normal dose of aspirin, ibuprofen, or acetaminophen.
- Your hand grip becomes weak.
- Minor symptoms do not improve after one month of prevention and home treatment.
- Any numbness remains after one month of home treatment. Long-term numbness can lead to permanent loss of some hand function.

Other resources

- Connect to our Web site at kp.org to access health and drug encyclopedias, interactive programs, Healthy Living classes, and much more.
- Check your *Kaiser Permanente Healthwise Handbook*.
- Contact your Kaiser Permanente Health Education Center or Department for health information, programs, and other resources.

This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other health care professional. If you have persistent health problems, or if you have additional questions, please consult with your doctor. If you have questions or need more information about your medication, please speak to your pharmacist. Kaiser Permanente does not endorse any brand names; any similar products may be used.