

Repetitive Strain Injury: A major occupational hazard



Repetitive strain injury (RSI) is a blanket term used to describe more than 20 disorders of the musculoskeletal system, including carpal tunnel syndrome, tendonitis and bursitis. RSI can affect anyone involved in work that requires frequent repetitive motion of their arms or hands. It's more likely to happen if these movements are combined with awkward posture and/or excessive force in work or leisure activities. For example, office workers on computers, musicians, labourers and assembly line workers may all experience symptoms of RSI at some point in their career. RSI is one of today's major occupational hazards, affecting approximately 2.3 million Canadians annually. Many of these injuries can be prevented with improved work habits and posture (ergonomics). Ergonomics is an applied science directed at the design and arrangement of work tools and equipment to ensure products and environments are comfortable, safe and efficient for people to use.

SIGNS AND SYMPTOMS

Numbness, tingling, sharp pain, dull ache, weakness, loss of grip strength and restricted mobility in the affected joints may be signs and symptoms of developing RSI. In its severest form, RSI can render people incapable of carrying out even simple tasks, at home and at work.

While most cases of RSI are treatable, it can recur and may become chronic without appropriate management. It is easier to prevent RSI than to 'cure' it. Individuals who feel they are at risk should take preventative measures before a serious RSI condition develops. Early diagnosis and treatment are vital to ensure recovery from the symptoms of RSI.

PREVENTING INJURY

The importance of RSI prevention cannot be over-emphasized. Making the right changes to your work habits could save you endless amounts of pain and disability. Physiotherapists recommend these simple tips to help prevent RSI:

- Maintain correct posture while working to reduce strain on joints;
- Have your work station evaluated to make sure it is ergonomically correct for you;
- If your work involves heavy activity, warm up before you start and do simple stretches during the day;
- Decrease excessive force in any activity. For example, avoid typing forcefully; or use a dolly to transport heavy items etc;
- Change your posture often and take frequent breaks, alternating between sitting and standing when possible, especially if you have a sedentary job;
- Report problems early so that something can be done to help you or to change the work process;
- Aim to be fit and healthy. Good muscle strength, flexibility and endurance help improve your body's ability to absorb repetitive strain; and
- Plan recreation that focuses on different activities than those you do at work. For example, if you're experiencing numbness in hands or wrists (carpal tunnel syndrome) try swimming or running rather than a racquet sport to reduce the amount and frequency of strain on those joints.

TIP: If you work for long periods in awkward positions, warm up before you start. Prevent discomfort and fatigue with simple stretches during the day.

Stretching is an essential part of RSI prevention. However, if you already have symptoms, improper stretching can cause further damage. Talk to a physiotherapist to find what exercise is best for you.

TIP: Over-stretching can increase soreness or burning sensations. Stretch muscles only until you feel a gentle pull.

PHYSIOTHERAPY AND RSI

Physiotherapists are healthcare professionals skilled in evaluating, maintaining and restoring physical function. They can provide education to help prevent RSI and provide treatment to help relieve symptoms that have already developed.

A key component to an effective treatment plan is to identify and then alter or eliminate the situations that contributed to the onset of RSI.

A physiotherapist can advise you on modifications to your work environment as well as assist you in improving work habits and postures. Specific strengthening and stretching exercises, combined with aerobic conditioning, may be part of the prescription to prevent recurrence of RSI.

FIND A PHYSIOTHERAPIST

Finding a physiotherapist may vary from province to province. Here are some suggestions:

- Check the yellow pages of your local telephone book for listings of physiotherapists and physiotherapy clinics. You can make an appointment with a physiotherapist directly anywhere in Canada.
- Ask for a recommendation from your family doctor. While a direct referral is not necessary, your physician may be able to suggest a physiotherapist for your particular concern. Further, while many physiotherapy services are covered by provincial health care plans, Workers Compensation plans and private insurance, some insurance plans require a doctor's referral for reimbursement.
- Visit the Canadian Physiotherapy Association's web site at www.physiotherapy.ca, to access our "Find A Physiotherapist" directory and to find out more information about physiotherapy. The CPA web site can also link you to resources for finding physiotherapists through provincial branches and regulatory colleges.