



## HEALTH AND SAFETY **FACT SHEET**

# Repetitive strain injuries

### What are repetitive strain injuries?

Repetitive Strain Injuries (RSIs) are a family of painful disorders affecting tendons, muscles, nerves and joints. They cause persistent or recurring pains most commonly in the neck, shoulders, forearms, hands, wrists and elbows.

RSIs have a variety of causes and include injuries to different parts of the body. RSIs are also known by other names, such as:

- Work-Related Musculoskeletal Disorders.
- Repetitive Motion Injuries.
- Cumulative Trauma Disorders.
- Occupational Cervicobrachial Disorders.
- Overuse Injury.
- Regional Musculoskeletal Disorders.
- Soft Tissue Disorders or Soft Tissue Injuries.

The different terms indicate these injuries are caused by repetition and also by force, rapid movement, overuse, static loading, excessive strain, uncomfortable positioning of limbs or

holding an unnatural posture for too long.

RSIs are an all too common cause of CUPE members' suffering. But it is hard to fully gauge the extent of the problem due to the under-reporting of RSIs.

Members who suffer from RSIs experience symptoms in joints, muscles, nerves and tendons, such as:

- Numbness and stiffness.
- Tingling and burning sensations.
- Pain and dull aches that can be strongest at night.
- Dry and shiny palm.
- Swelling around the affected area.
- Wasting of the muscles at the base of the thumb.
- Loss of dexterity in the affected area.

Pain in one area of the body may spread to other areas. For example, pain in the wrist can move to the forearm, shoulder joint and neck muscles. Often when members feel pain from doing work in one way they may try to compensate by doing work in another way that causes other strain injuries. As a result, their pain and injuries persist or get worse.

## What causes RSIs?

RSIs result from staff layoffs and poor work organization. Layoffs mean that CUPE members are being asked to do more with less help. This situation leads to inadequate breaks, an increased pace of work and stress.

These working conditions are perfect for RSIs to occur. CUPE members have no time to achieve muscle recovery between repetitive movements and they are working longer due to unnecessary overtime. This lack of worker control leads to RSIs. Improper direction, supervision and training are examples of poor work organization that can contribute to RSIs.

The causes of RSIs can be classified in the following ways:

- Rapid movement injuries caused by continual rapid movements like typing.
- Forceful movement injuries caused by muscle movements, such as twisting a screwdriver.
- Static loading injuries caused by fixed positioning with unsupported limbs like typing without wrist support.

Poor work organization leads to RSIs, for example:

- Improper equipment and tools force members to perform work in unacceptable ways.
- Standardized equipment and tools that are designed for the average male body type and don't accommodate different body types.

- Substandard workstation design puts undue physical stress on members.
- Increased pace of work causes more repetitive movements.
- Poorly maintained equipment prohibits safe and correct ways of working.
- Inadequate training causes members to perform tasks dangerously.
- Improper temperature and humidity causes members to tire quickly or have muscle inflexibility.
- Excessive vibration from equipment and tools strain muscles and joints.

## What are the hazards?

RSIs affect the physical and psychological health of CUPE members. But it also spills out of the workplace, negatively affecting members' families. The cumulative effects of RSIs can be devastating.

Major outcomes of RSIs are:

- Stress and burnout while working with RSIs.
- General muscle, tendon and nerve damage.
- Tendonitis, tenosynovitis, peritendinitis and trigger finger.
- Carpal Tunnel Syndrome and de Quervain's disease.
- Epicondylitis, bursitis and Dupuytren's Contracture.
- Ganglion, digital neuritis and radial nerve entrapment.
- Thoracic outlet syndrome, rotator cuff strain, tension neck syndrome and frozen shoulder.

Some of the more common RSIs are tendonitis, epicondylitis and Carpal Tunnel Syndrome. Symptoms of

tendonitis include pain, weaknesses, swelling, dull ache and a burning sensation in the wrist, shoulder and fingers. Long-term tendonitis can lead to tendons locking up, resulting in limited movement of muscles and joints around the affected area. Tendonitis is common in maintenance workers who perform repetitive movements of the shoulders and wrists.

Epicondylitis is commonly called tennis elbow or golfer's elbow. Symptoms include tenderness and swelling around the elbow. Causes of epicondylitis include strain on the forearm (e.g., from hammering) and twisting of the wrist and forearm (e.g., turning a screwdriver or carrying a heavy load with arms extended). Mechanics and skilled trade workers often suffer from epicondylitis.

Carpal Tunnel Syndrome symptoms include numbness, tingling, burning sensations, dry palm and wasting of muscles at the base of the thumb. Repetitive finger movements, pinching and squeezing with fingertips, hand exertions with bent wrists and twisting of wrists can lead to this painful injury. Any member using a keyboard or performing highly repetitive movements of the wrist and fingers is prone to Carpal Tunnel Syndrome.

### **Identify the problem**

A first step is recognizing that RSIs are a health and safety hazard in your workplace. Surveys and mapping techniques are excellent tools to identify RSIs in your workplace. An RSI survey can be done in co-operation with the employer, in which case the union approves the survey and is involved in

collecting and assessing the information generated by the survey. The union should conduct its own RSI survey if the employer resists the idea or denies that RSIs are a problem. Body mapping, hazard mapping and your world mapping techniques can be used, in addition to surveys, to identify RSI hazards.

Body mapping is particularly useful in uncovering ergonomic injuries. Locating work-related aches and pains on a body map allows members to identify and learn about RSIs.

Workplace inspections by CUPE members are an important tool in uncovering and identifying RSI hazards, and should be carried out regularly.

### **Actions**

RSI hazards largely centre on issues of control over work and cutbacks. Taking action on RSIs involves members exercising control at work.

The following actions can help combat RSIs:

- Refuse unsafe working conditions and unnecessary overtime.
- Report RSI hazards.
- Conduct regular workplace inspections to uncover RSI hazards.
- Put RSIs on the health and safety committee agenda.
- Demand employers take action on improving working conditions and ergonomic conditions that cause RSIs.
- Insist employers manage work processes and organization so that RSIs are eliminated.

## Strategies for change

The strategies outlined below complement the actions listed above. RSIs can be eliminated through the following:

- Keep RSI issues on the health and safety committee agenda until they are resolved.
- Monitor and test tools, equipment and workstations to prevent RSIs.
- Demand regularly scheduled maintenance on equipment and tools.
- Call for proper training and member input on choosing tools and equipment.
- Allow members to set their own work organization and processes.
- Give workers control by allowing them to adjust humidity and temperature levels in order to minimize tiredness and muscle fatigue.
- Demand employers obey health and safety laws and regulations pertaining to RSI hazards.
- Where legislation does not provide for specific RSI controls, monitoring, or access to information about RSIs, the union can negotiate contract language that reflects the protection of members.
- Put the issue of RSIs on the bargaining table.
- Sponsor CUPE education around the issue of RSIs and their effects.
- Create a RSIs policy for CUPE workplaces starting with a statement acknowledging that RSIs are a health and safety hazard, and that all steps should be taken to prevent the hazard.

- Collective job action around the issue of RSIs.

Employers have the responsibility to provide a healthy and safe workplace. This responsibility is known as the general duty clause. Getting rid of RSIs is an important part of a healthy workplace. Ending RSIs requires the participation of our membership. Through education and activism, RSIs can be eliminated from CUPE workplaces.

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