

Repetitive Stress Injuries

Repetitive Stress Injuries (RSIs) are described as wear and tear on joints and surrounding tissue because of overuse. Although every joint in the body has the potential for being affected, the lower back and upper limbs (arms, shoulders) are the areas that receive the most injuries. RSI's are chronic conditions that worsen over time if the wear and tear continues. In many instances, repetitive stress injuries are temporary, but they are painful and sometimes permanently disabling.

Symptoms of Repetitive Stress Injuries can include:

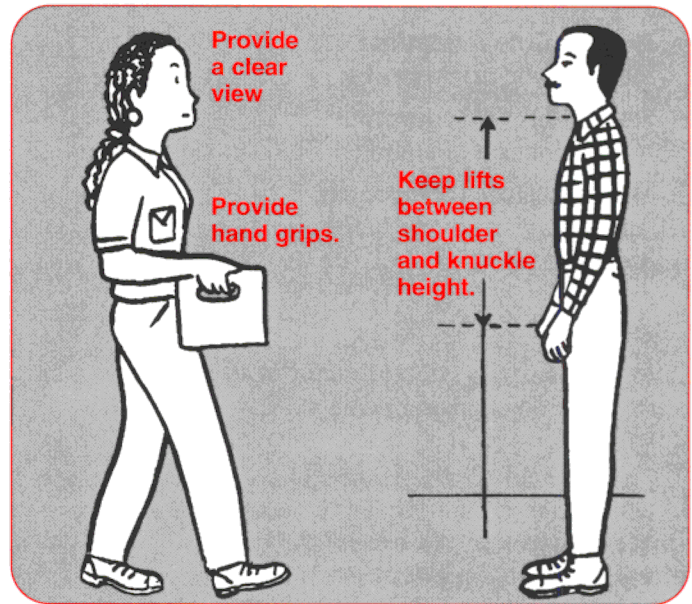
- soreness, pain and discomfort
- a "burning" sensation
- swelling, redness, weakness and clumsiness
- numbness and tingling sensation, it feels like "pins and needles"
- possible popping and cracking noise in joints

Glossary of Most Common Repetitive Stress Injuries

Hand and Wrist

The following injuries can be caused by holding the wrist or fingers in an awkward position for long periods of time, doing the same motion over and over again, repetitive motion. Using a power tool that requires continuous finger pressure can lead to these injuries too.

- **Tendinitis:**
An inflammation of a tendon, tissue that connects a muscle to a bone.
- **Synovitis:**
The inflammation of a tendon sheath (covering).
- **Trigger finger:**
An inflammation of a tendon in the finger. The thumb cannot move because the tendon becomes locked in its sheath and when you attempt to move the thumb you hear a snapping sound.
- **DeQuervains Disease:**
Inflammation of the tendons in the thumb. DeQuervains will typically affect the base of the thumb.
- **Ganglin Cysts:**
Inflammation of the tendon sheath in the back of the hand causing a bump under the skin.
- **Digital Neuritis:**
Inflammation of the nerves in the finger, which is caused by repeated contact or continuous pressure.
- **Carpal Tunnel Syndrome:**
A compression of the median nerve (nerve that runs through the wrist to four fingers in the hand) as it passes through the carpal tunnel.



Neck and Back

Lifting heavy things or remaining in an awkward position for long periods of time can cause disabling injuries such as:

- **Tension Neck Syndrome:**
Soreness of the neck that is related to tenseness of neck muscles.
- **Posture Strain:**
Results from chronic stretching or overuse of neck muscles or soft tissue in the neck.
- **Degenerative Disc Disease:**
A chronic deterioration, narrowing and hardening of a spinal disc.
- **Herniated Disc:**
The rupturing or bulging out of a spinal disc.
- **Mechanical Back Syndrome:**
A degeneration of the spinal joints (part of the vertebra).
- **Ligament Sprain:**
The tearing or stretching of a ligament (the connective tissue that helps support bones).
- **Muscle Strain:**
The overstretching or overuse of a muscle.

Elbow and Shoulder

Injuries to elbows and shoulders can be caused by heavy lifting, holding the body in an awkward position or by performing an awkward motion.

- **Epicondylitis:**

("Tennis elbow") inflammation of the tendon in the elbow.

- **Bursitis:**

An inflammation of the bursa (small pockets of fluid in the shoulder and elbow that helps the tendons glide).

- **Rotator Cuff Tendinitis:**

Inflammation of the tendon on the shoulder.

- **Radial Tunnel Syndrome:**

A compression of the radial nerve in the forearm.

- **Thoracic Outlet Syndrome:**

A compression of the nerves and blood vessels under the collar bone.

Legs

Injuries to the legs can occur from prolonged sitting, standing or an awkward position.

- **Subpatellar Bursitis:**

("housemaid or clergyman's knee") an inflammation of the patellar bursa (the flat, moveable bone at the front of the knee).

- **Patellar Synovitis:**

("water on the knee") an inflammation of the synovial tissue (lubricating liquid) deep in the knee.

- **Phlebitis:**

Varicose veins and related blood vessel disorders that result from constant standing.

- **Skin Splints:**

Very small tears and inflammation of muscle surrounding the skin bone.

- **Plantar fasciitis:**

Inflammation of the fascia (thick connective tissue in the arch of the foot).

- **Trochanteric bursitis:**

An inflammation of the bursa at the hip that results from constant standing or bearing heavy weights.

There are many factors that can increase the risk of developing Repetitive Stress Injuries. The more conditions that are involved and the greater the exposures are to each, the higher the chances of developing a disorder.

Conditions	Risk
1. Repetitive	The number of motions per day that a particular body part performs.
2. Force	The amount of energy required.
3. Awkward Postures	Positions of the body that are not natural. [For example: bent wrists and elbows that are away from the normal position at the side of the body]
4. Contact Stress	Excessive contact between body tissue and sharp edges of objects or non flexible surfaces of a tool or piece of equipment.
5. Vibration	The vibration of the tools or equipment (whether it is a hand-held tool or a whole body vibration).
6. Temperature Extremes	Excessive heat or cold.
7. Physical Condition	A person's health.
8. Other Diseases	Illnesses such as diabetes, gout or arthritis.

This information was obtained from several sources: Occupational Health and Safety; National Safety Council; Occupational Exposure to Hand-Arm Vibration, National Institute on Occupational Safety and Health; and The Ergonomic Edge, MacLeod.

*If you are experiencing any of the symptoms described,
please remember they can be work related and therefore compensable.
For further information contact the District Council 37 Safety and Health Unit at (212) 815-1685.*