# **Musculoskeletal Disorders FACT SHEET**

# What are MSDs?

Musculoskeletal disorders (MSDs) are injuries and disorders of the musculoskeletal system. These include the muscles, joints, tendons, tendon sheaths, bones, ligaments, nerves, bursa, and blood vessels. These injuries can be caused or aggravated by various hazards or risk factors in the workplace. MSDs are also known as Repetitive Strain Injuries, Repetitive Motion Injuries and Cumulative Trauma Disorders. MSDs account for 40% of all lost-time claims in Ontario (WSIB) due to pain and suffering and loss of productivity.

**Common MSDs:** Carpal Tunnel Syndrome, Tendonitis, Epicondylitis (tennis elbow), Bursitis, Rotator cuff injuries

## **Know the Symptoms of MDSs:**

MSDs can slowly progress symptomatically. Pain is the most common symptom which may result from muscle tightness, tendon and joint stiffness, numbness, redness and swelling of the affected area.

**Early stage:** Fatigue, soreness, mild pain and aching of the affected limb/fingers occur during the work day but subside during days off work and at night.

**Intermediate stage**: Fatigue, aches and pain are almost immediate at the start of a work shift and persist at night. Productivity is reduced or affected.

**Late stage:** Even at rest, pain, soreness, swelling and fatigue are persistent. Unable to perform even light duties and sleep is affected. Ongoing use of medication for pain relief.

MSDs are diagnosed through laboratory and electronic testing which determines nerve or muscle damage.

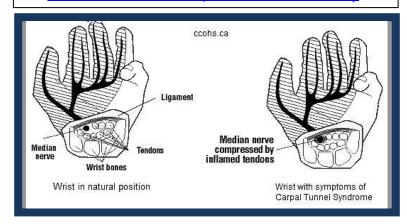
#### **How to prevent workplace MSDs:**

- Assess and redesign the workstation ergonomically
- Assess and redesign the work tasks to eliminate the hazards and contributing factors
- Apply engineering and administrative controls **How to treat MSDs:**
- Restrict movement
- Apply heat or cold compress to affected area
- Exercise the affected body part
- As a last resort, use medication prescribed by your doctor



#### More Info on MSDs:

- Workplace Safety Insurance Board
- Ontario Ministry of Labour
- Canadian Centre for Occupational Health and Safety



### Work Related Hazards include:

- Awkward postures and positions
- Repetitive motions without rest
- Static postures without rest
- · Bending, twisting, carrying or lifting
- Overextension or overreaching
- Pushing heavy or awkward loads
- Pulling heavy or awkward loads

#### **Examples of contributing factors:**

- Fixed position of hands, neck and shoulders creating tension and contraction; decreases blood flow
- Contact stress or force creates more muscular effort
- Pace of work recovery time required
- Vibrations cause numbness and Raynaud's Syndrome
- Temperature
  - Heat and humidity cause the body to tire more rapidly leading to injury
  - Cold causes decreases in flexibility of muscles and joints leading to injury
- Personal diversity, knowledge and skill

