

# **Safety Meeting**

## **Repetitive Motion Injuries**



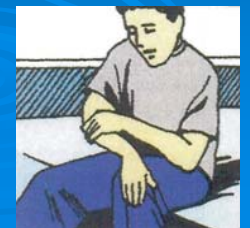
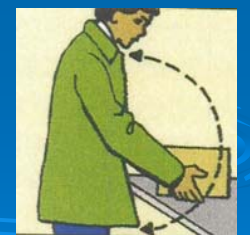
**EDM Services, Inc.**

**March 2009**

# SYMPTOMS

Repetitive motion injury symptoms include:

- fatigue in muscles and joints
- aches and pains
- swelling
- tightness/stiffness (especially over joint areas)
- tingling or numbness
- weakness.



# CAUSES

- **Repetitive motion**: when a task is repeated frequently it can cause strains and fatigue in muscles, joints and tendons.
- **Forceful exertion**: tasks that require force place a higher load or stress on muscles, tendons and joints.
- **Awkward posture/position**: poor posture while performing a task, especially a repetitive task, puts strain on joints and muscles.
- **Duration**: tasks that require the use of the same muscles for long periods of time can cause fatigue in those muscles and make them susceptible to injury.
- **Compression**: pressing body parts on hard or sharp surfaces causes a decrease in blood flow to the muscles, tendons and nerves in that area. This can cause symptoms of tingling, numbness and change in sensation, and lead to tissue damage in that area.
- **Vibration**: activities involving vibration put stress on individual parts or the whole body.
- **Poor physical health**: conditions such as diabetes, cardiovascular disease, Raynaud's, arthritis, smoking, alcoholism, gout, hypertension, poor nutrition, lack of exercise, stress and job dissatisfaction can increase the chance of developing a repetitive motion injury.

## CAUSES cont...

Activities at work that can lead to injury are those that are repetitive in nature:

- using the same hand and arm in performing the same work tasks for prolonged periods of time
- holding your hand and arm in awkward positions that put strain on nerves, muscles and tendons

Some examples are:

- > data entry
- > painting
- > hammering
- > filing
- > typing reports
- > stapling/hole punching
- > cradling the phone under your chin

Activities performed at home that can lead to repetitive motion injuries include:

- > computer work
- > sewing and woodwork
- > gardening
- > household chores such as cooking, laundry and cleaning
- > hobbies such as knitting
- > playing a musical instrument
- > sports such as tennis, golf and racquetball

Being aware of these risk factors can assist you in changing the way you perform certain activities and preventing injuries from occurring.

# PREVENTION OF REPETITIVE MOTION INJURY

It is important to decrease the amount of continuous time spent performing repetitive activities that can lead to injury.

- Taking a break from sitting at work by getting up every hour.
- Taking a "stretch break" every 20 to 30 minutes for 1 to 2 minutes. Stretching the tendons and muscles can help reduce your risk of injury.
- Vary or rotate the tasks you perform during the course of the day.

There are also general guidelines for your workspace:

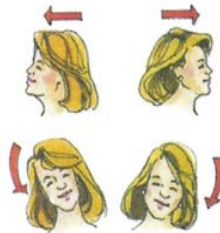
- Adjust your workstation and chair so the keyboard is just below your hands when your shoulders are relaxed, elbows at 90 degrees and arms/wrists are flat.
- Maintain proper posture.
- Take care of yourself-eat well, exercise and get enough sleep.
- Pay attention to symptoms early.

Being aware of risk factors as causes of repetitive motion injury is the first step. Changing your work or home environment to reduce these risk factors is a priority, especially when symptoms are present and intermittent. We often take for granted that all of our joints, nerves, muscles and tendons will work when we need them to. It is important not to overlook the long-term effects of stress and strain on joints, nerves, muscles and tendons that can lead to injury.

# Conditioning Exercises to Prevent RMI's

## NECK FLEX

Sit or stand with your shoulders relaxed and your head erect. Turn your head slowly to the right and then to the left as far as you can without discomfort. Next tilt your head slowly to the right and then to the left, bringing your ear close to your shoulder. Do not raise your shoulder! Repeat five times.



## SHOULDER ROLLS

With your head erect, relax your arms at your sides. With your elbows close to your sides, raise your shoulders up and rotate them back, down, forward, and up. Repeat five times. Change direction and rotate your shoulders forward, down, back, and up. Repeat five times.



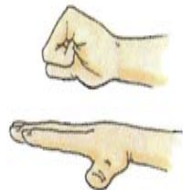
## WRIST FLEX

Start with your wrist straight and fingers extended. Slowly bend the wrist downward until your hand forms a right angle with your forearm. Return to starting position. Then bend your wrist as far back as you can. Repeat five times with each hand.



## CLENCH AND FAN

With your wrist held straight, make a fist and hold it for five seconds. Release and spread your fingers, and hold for five seconds. Repeat five times with each hand.



## PALM UP/PALM DOWN

With your elbow at your side, hold your forearm out with the palm facing downward. Rotate your palm upward. Alternate between these positions five times. Repeat with the other arm.

