

# Warming up for a Physical Work Day



**According to Statistics Canada...** 2.3 million Canadian adults annually experience musculoskeletal disorder serious enough to limit their normal activities; and the majority of these injuries are caused by **work-related activity**.

## Repetitive Strain Injury (RSI)

RSI (or musculoskeletal disorder) is an umbrella term used to describe a collection of injuries that affect the muscles, nerves, and tendons. Tendonitis, tenosynovitis and carpal tunnel syndrome are some common examples. Common symptoms include aches, pains, tingling, swelling and loss of joint movement and strength in the affected area(s).



## Major Occupation Hazard

Many factors in a physically demanding workplace can play a role in the development of RSI including: repetition, work pace, work organization, awkward or fixed positions, forceful movements, vibration, cold temperatures, contact stress, psychosocial stress, and insufficient recovery time. Symptoms can progress to preventing you from performing properly at work and in your daily life.

## Why Should I Stretch Before My Work Day?

Stretching is an essential part of RSI prevention. It helps prevent future injury, promotes healing, improves flexibility, and overall functioning.

**Stretching is necessary to increase range of motion.** Sudden forceful movements can cause serious injury to muscles and tendons. Stretching also releases synovial fluid stored in the joints which helps lubricate and project your joints from friction and injury.

**Stretching brings blood supply to soft tissues.** This improves circulation so you don't get tired as easily. Stretching helps elongate muscles, improve flexibility, promote healing and prevent future injury.

Work-related RSIs account for **over 40%** of lost-time injuries allowed by Ontario's WSIB – the single largest class of compensation claims.


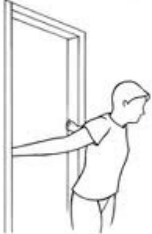
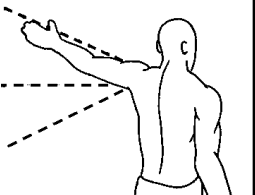

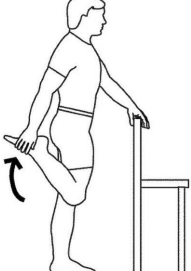
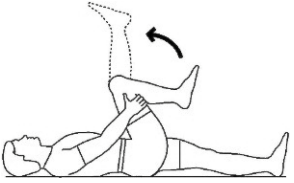
## How to Properly Stretch

- **Focus on the major muscle groups**, i.e calves, thighs, hips, lower back, neck and shoulders. You should also stretch those muscles you regularly use at work, such as the wrist and hands.
- **Do not hold your breath or overstretch** to the point of pain or discomfort.
- **A gradual, sustained stretch** is preferred over a quick, bouncy stretch. If you stretch the muscle slowly, the muscle loosens and you can stretch further. If you stretch too quickly, the muscle reacts with a strong contraction, which increases tension.
- **Do a short warm up first**, then stretch and hold each stretch for 30-40 seconds.

Resources: <http://www.MayoClinic.com>, <http://www.sparkpeople.com/>, <http://www.physiotherapy.ca/>



## Physical Work Day Stretching Exercises

<p><b>Hip Flexors</b></p> <ul style="list-style-type: none"> <li>• Kneel on your right knee. Place your left foot in front of you, bending your knee and placing your left hand on your left leg for stability.</li> <li>• Place your right hand on your right hip to avoid bending at the waist. Keep your back straight and abdominal muscles tight.</li> <li>• Lean forward, shifting more body weight onto your front leg. You'll feel a stretch in your right thigh.</li> <li>• Hold for about 30 seconds. Switch legs and repeat.</li> </ul>	
<p><b>Pectorals and Shoulders</b></p> <ul style="list-style-type: none"> <li>• Hold elbow at a right angle and place forearm along door frame.</li> <li>• Lunge forward, keeping chest and pelvis facing squarely forward.</li> <li>• Hold 30-60 seconds. Try holding arms higher or lower. Repeat on other side.</li> </ul>	
<p><b>Shoulders, Biceps, Triceps, Wrist, Hand</b></p> <ul style="list-style-type: none"> <li>• Extend one arm along a wall, with arm parallel to the ground and palm facing wall.</li> <li>• Attempt to open chest to that shoulders are perpendicular to arm.</li> <li>• Extend fingers and palm away from wall as much as possible.</li> <li>• Hold for 30-60 seconds. Try holding arms higher or lower. Repeat on other side.</li> </ul>	
<p><b>Lower Back</b></p> <ul style="list-style-type: none"> <li>• Lie on your back on a firm surface with the backs of your heels flat on the floor.</li> <li>• Gently pull one knee up to your chest until you feel a stretch in your lower back.</li> <li>• Bring the knee as close to your chest as comfortably possible.</li> <li>• Keep the opposite leg relaxed in a comfortable position, either with your knee bent or with your leg extended.</li> <li>• Hold for about 30 seconds. Switch legs and repeat.</li> </ul>	
<p><b>Quadriceps</b></p> <ul style="list-style-type: none"> <li>• Grasp your ankle and gently pull your heel up and back until you feel a stretch in the front of your thigh.</li> <li>• Tighten your stomach muscles to prevent your stomach from sagging outward, and keep your knees close together.</li> <li>• Hold for about 30 seconds. Switch legs and repeat.</li> </ul>	
<p><b>Hamstrings</b></p> <ul style="list-style-type: none"> <li>• Lie on the floor near the outer corner of a wall or a door frame if desired.</li> <li>• Raise your left leg and rest your left heel against the wall. Keep your left knee slightly bent.</li> <li>• Gently straighten your left leg until you feel a stretch along the back of your left thigh.</li> <li>• Hold for about 30 seconds. Switch legs and repeat.</li> </ul>	

Resource: <http://www.MayoClinic.com>, <http://web.eecs.umich.edu/>