

Ergonomics at Work (Part 2 of 2)



Sitting in front of the computer all day, standing for prolonged periods in front of a class, and lifting with poor posture and technique can lead to a series of medical conditions including muscle strain/sprain, inflammation of the joints and tendons,

excessive disc compression, blood circulation disorder, nerve impaction, and eye strain. Symptoms you may experience from these conditions include headaches, pain, muscle spasms, joint soreness, and numbness in the back, hands, wrist and eye

irritation. Utilizing proper posture and body mechanics at work can help to minimize the risk of developing symptoms or conditions such as these. Practice these following tips to ensure your physical health at work.

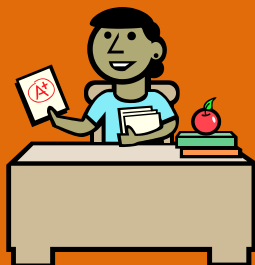
Sitting in Front of the Computer

Try to position your body so that you are sitting in your chair with a 90 degree angle at your knees and hips. It may be necessary to raise your chair to meet the height of the work surface. If this results in your legs not being supported by the floor, try using a foot rest. Always ensure your back is being supported by your chair back to minimize spinal loading. Your monitor should be positioned so that you are viewing the top portion of the screen when your

neck is in neutral alignment. Distance away from you should be 18-24" (one arms length), farther causes a head forward posture and too close results in eye strain. Maintain shoulders in neutral alignment with arms close to sides of body, a 90 degree angle at the elbows and straight wrists when keying and mousing. The mouse should be positioned on the same surface as the keyboard, directly to the right or left.

What is carpal tunnel syndrome?

It is the compression of a key nerve in the wrist. There is a literal tunnel that holds ligaments and bones.



One of the top workplace injuries is a same level fall. In other words: a fall on a slippery or uneven floor, or a snowy / icy parking lot. If standing to work, always be careful and take note of obstacles or impediments.



Desk Organization

Ensure all items you use on a regular basis at your desk such as, your note pad, pen, calculator, phone are within your primary work zone, within arms reach away. This will prevent unnecessary reaching and bending. Items used less frequently should be stored further away. It is always a good idea to stand to reach items which are not easily accessible or stored in above desk storage units. Drop down to one knee to remove something from a bottom drawer if the item is heavy.

Standing to Work

Always wear comfortable supportive shoes with less than a two inch heel when standing to work. Dynamic standing produces less stress on the spine, so shift weight between legs or take a few steps back and forth to reduce stress build up in the musculature of the spine. Placing one foot on a slightly raised surface such as a low step stool, can help to redistribute weight.

Low Level Work

If working at a low level, (i.e. with younger children sitting at low desks), avoid bending and stooping. Try squatting or to reduce stress placed on the knee joint, go down to one or two knees. Sitting on a chair to meet them at the same level is an option or have them come to your desk if possible.

Upper Extremity Work

Avoid excessive reaching. Attempt to use step stool or ladders to access higher shelves. Avoid lifting heavy articles above shoulder level. The muscles are in a weak position when reaching above shoulder level and this can lead to an injury.

Lifting

Avoid lifting and transferring loads while sitting. When standing to lift, feet should be shoulder width apart, one slightly in front of the other, lift with two hands, and keep the load as close to stomach as possible.

Keep the back upright, bend at the hips, and use the thigh muscles to raise the load. Do not twist when coming up from a lift. And remember if the lift seems too awkward or heavy, ask for help.

Carrying

A heavy purse or backpack over both shoulders can be used to evenly distribute weight. Using a cart or a wheeled bag when carrying supplies and materials should be considered.

Prevention of aches, pains and fatigue at work can be minimized by keeping in mind proper body mechanics and posture. Proper positioning and alternating your body movements through the day through smart planning,

stretching and exercising can help to increase your comfort and work day endurance. Stay tuned to see how you can employ some of these same techniques to increase your comfort and safety with driving.



An Occupational Therapist can assess your workstation to ensure optimal ergonomics, increase comfort and help prevent injuries or re-injury.



*To contact the
Early Intervention
Program with feedback,
questions, or to arrange
an appointment,
please email eip@nstu.ca
or call 477-5621
or toll-free 1-800-565-6788*