

CAUT Health and Safety Fact Sheet



Working In a Static Position

ISSUE 11

The human body was designed for movement, and needs that movement to stay fit and limber. Restriction of movement places it in an unnatural mode which leads to pain, fatigue and potential long-term injury.

Working in the university or college sector often requires people to work in conditions which require them to stand or sit in static (non-moving) positions for extended periods. Lecturing, writing, and computer, lab and other research initiatives are some examples of work that is often done in static positions.

This fact sheet will assist with identifying key areas of concern, alternative or improved methods of body function, and some simple, standard exercises to relieve tired and cramped muscles.

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The Ontario Ministry of Labour notes that in Ontario workplaces, Musculoskeletal Disorders [MSD's] account for 42% of all lost-time claims and costs, and 50% of all lost-time days.¹ This is directly attributable to today's sedentary work environment.

Consult your workplace Joint Health and Safety Committee (JHSC) for workplace policies regarding this issue, and alert them when ergonomic problems arise. Prevention models are most effective with worker input and participation.

Types of Static Positions

Standing and sitting are classic positions that most people experience in an office, classroom or research type of environment. Maintaining them for any length of time increases discomfort and pain, and if prolonged, eventual tissue and nerve injury.

Impact and Consequences

There are three main areas of the body which are affected: neck and shoulders, lower back and legs, and feet. Standing or sitting can affect all of them.

Standing:

- joint compression in spine, hips, knees and feet
- sore feet, stiff legs and low back pain

Collective Agreement Language

Encourage your academic staff association to develop good ergonomic collective agreement language for safer working conditions at your worksite.

CAUT's collective bargaining and health and safety staff can assist your association in preparing appropriate wording.

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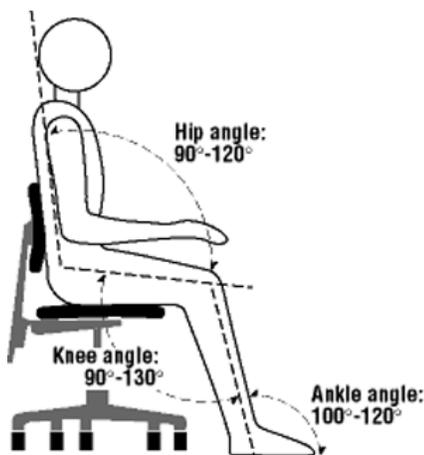
- Plantar fasciitis, flat feet and heel spurs
- postural muscle fatigue – slouching
- stiff neck and shoulders
- compromised circulation in legs and feet
- varicose veins
- precipitation of rheumatic diseases of tendons and ligaments

Sitting:

- alters the normal curvature of the spine
- chronic neck and back pain
- contact stress on upper or lower thighs
- awkward or sustained posture
- swelling, pain, numbness and tingling in legs and feet
- Deep Vein Thrombosis (DVT)
- sore and tired arms and hands

Safe Work Practices

It is crucial to ensure that both the work environment and your body's functioning within it are safe and compatible. The work area should be adapted to you – not the other way around. Sound



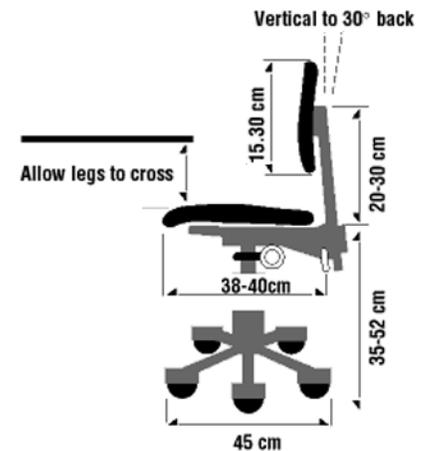
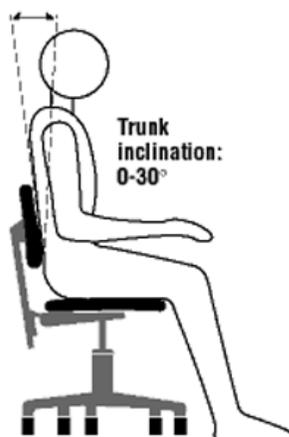
ergonomic practices and equipment will reduce the potential of developing MSD's.

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Change body positions frequently, alternating sitting and standing positions to ease confined movement. If working in a sitting position, consider using a standing work table on an intermittent basis. If working in a standing position, consider using an elevated foot rest to take pressure off the neck, spine, hips and feet, or alternate with intermittent sitting.

Seating Systems

- Back rest with height and angle adjustment, contoured support for lumbar and pelvic areas, and tilt resistant
- Seat should: accommodate height, tilt, slide, have adequate width and depth, have breathable, non-slip covering, and front edge contoured downward



- Armrests should be adjustable for height and width, removable, tilt and slightly cushioned
- Base: five-point base, wheels or casters suitable for flooring type, and swivel mechanism
- Consider the intermittent use of a forward sloping (5-10) or kneeling chair

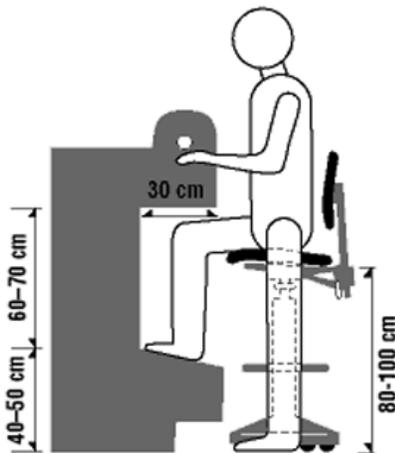
Seated Workstations

- Adjustable desk or bench
- Freedom of leg movement
- Can work with displays, controls or other needs without twisting or bending head, neck or spine (semi-circular workstation)
- Footrest for posture changes
- Feet and legs are in a non-dangling position
- Good, non-glare lighting

Standing Work

- Use an anti-fatigue mat appropriate to the flooring type
- Alternate standing with sitting
- Use an adjustable workstation appropriate to your height with toe-space to avoid bending

- Use sit-stand stools
- Use elevated footrests
- Periodic walking
- Consider insoles or orthotics
- Choose shoes with good support, a firm grip for the heels and toes are free to move, no flat soles or heels higher than two inches, and good arch support. Laced shoes are best.



Pregnant Workers²

Standing work can affect the health of the fetus. Six or more hours a day has been related to pre-term births and low birth weight.

- Limit standing to less than two consecutive hours
- Limit sitting to less than two consecutive hours
- Workstation should adjust to accommodate pregnant workers evolving needs
- Frequent breaks with legs raised

Motion and Exercising

Static work tires the body, and also the mind. Allowing for relief from muscle cramping and other symptoms by taking periodic breaks to move around and do some simple stretching exercises. See your healthcare provider if you have any concerns prior to implementing an exercise regime. Walking is a good exercise, that when done daily, or at a minimum for 30 minutes, three times a week, significantly helps in reducing the onset of osteoporosis and static workplace injuries. Swimming is a good alternative for those who may find walking or biking difficult.

Resources

Canadian Center for Occupational Health and Safety (CCOHS)
www.ccohs.ca

- *Exercises for a Healthy Back*
- *Working in Standing/Sitting Positions*
- *Working in a Sitting Position – Good Body Position*
- *Working in a Sitting Position – Work Chairs*
- *Working in a Sitting Position – Alternative Chairs*
- *Anti-Fatigue Mats*

Occupational Health Clinics for Ontario Workers (OHCOW)
www.ohcow.on.ca

- *Working on Your Feet*

Workers Health and Safety Centre (WHSC)
www.whsc.on.ca

- *Sitting on the Job: Static load, chronic Pain*

- *Prolonged Standing: Taking the load off*

References

Canadian Centre for Occupational Health and Safety
www.ccohs.ca

Mayo Clinic
www.mayoclinic.com

Ministry of Labour, Ontario
www.gov.on.ca

Occupational Health Clinics for Ontario Workers
www.ohcow.on.ca

Workers Health and Safety Centre
www.whsc.on.ca

Endnotes

- 1 Ministry of Labour, Ontario, "Prevent Workplace Pains & Strains!"
- 2 Adapted from OHCOW, "Working on Your Feet"

Diagrams reproduced from:

- *Working Standing/Sitting Positions*
- *Working in a Sitting Position – Good Body Position*
- *Working in a Sitting Position – Work Chairs*

with permission from the CCOHS (2006).