

Guide to Office Ergonomics

Sit/Stand Workstation

The purpose of this document is to provide Yukon government workers with information to properly use a Sit/Stand workstation.

Consult the manufacturers' recommendation for installation and set-up procedures for the workstation.

Ergonomic Background Information

Over the years there have been advancements in technology, office equipment design and the nature of work. With these changes new hazards may be introduced into the workplace. To understand these hazards the following three paragraphs provide some ergonomic concepts that apply to any workplace.

SITTING

Sitting uses less energy than standing but aids in stabilizing the body therefore, sitting is ideal for tasks like driving or computer work. For many years ergonomists have encouraged people that sit for prolonged periods to stand or move for 1-2 minutes every 20-30 minutes. Vast bodies of research has shown that these frequent breaks improve levels of comfort, performance and reduces the risk of musculoskeletal injuries.

STANDING

Prolonged static standing at work increases the risk of heart disease among men and the progression of carotid atherosclerosis because of the additional load on the circulatory system. It also increases the risk of varicose veins accounting for approximately 20% of the work related reports. Ergonomists have long recognized that standing at work is more tiring than sitting.

SIT/STAND

Sit/Stand workstations are a relatively new revolution to enter the workplace and the health benefits have yet to be determined. Sit/Stand workstations come at additional expenses and present different health considerations in the workplace.

As evidenced above there are ergonomic pros and cons to either sitting or standing. The use of a Sit/Stand workstation encourages working at different postures and therefore may provide health benefits over sedentary or stationary work. It is important to remember that a poorly arranged workstation and improper posture will not prevent a musculoskeletal injury whether you are sitting or standing at a workstation.

Sit/Stand Workstations are not recommended for people with orthopedic problems of the ankle, knee or hip. Consultation with a medical practitioner is advised.

Guidelines for Sit/Stand Computer Workstation

POSTURE

Keep your head, neck, torso in line and vertical. The human skeleton is stronger when in an erect/aligned posture. Feet should be directly under the shoulders and weight may be shifted from one foot to the other periodically. The use of a footrest to shift weight is also recommended.

- *The shifting of weight from foot to foot was recognized long ago when saloons introduced the foot rail at the bar to encourage cowboys to stay longer.*

An anti-fatigue mat may be required for extended periods of standing.

FOOTWEAR

Wear shoes that provide proper support. Supportive athletic shoes for standing and compression socks are suggested for prolonged periods of standing.

DESK

A desk deep enough to allow your monitor to sit directly in front of you. The keyboard and mouse should allow you to maintain your wrists straight and hands slightly below the level of your elbows.

MONITOR

Place the monitor directly in front of you at least 51 cms away. The top of the screen should be at or slightly below eye level. Should you wear bifocals lower the monitor approximately 3-5 cms. Place the monitor in a position to minimize glare from light sources. For dual monitors place them side by side with edges touching when using both screens simultaneously. Should the majority of the work be done on one computer, place the secondary monitor off to the side.

KEYBOARD AND MOUSE

Place the mouse and keyboard on the same surface that allows you to keep your elbows close to your body. Keep wrists straight and hands slightly lower than elbows (negative incline). Set mouse sensitivity for light touches. Consider using key board shortcuts or using the mouse with your alternate hand.

ADDITIONAL OBJECTS

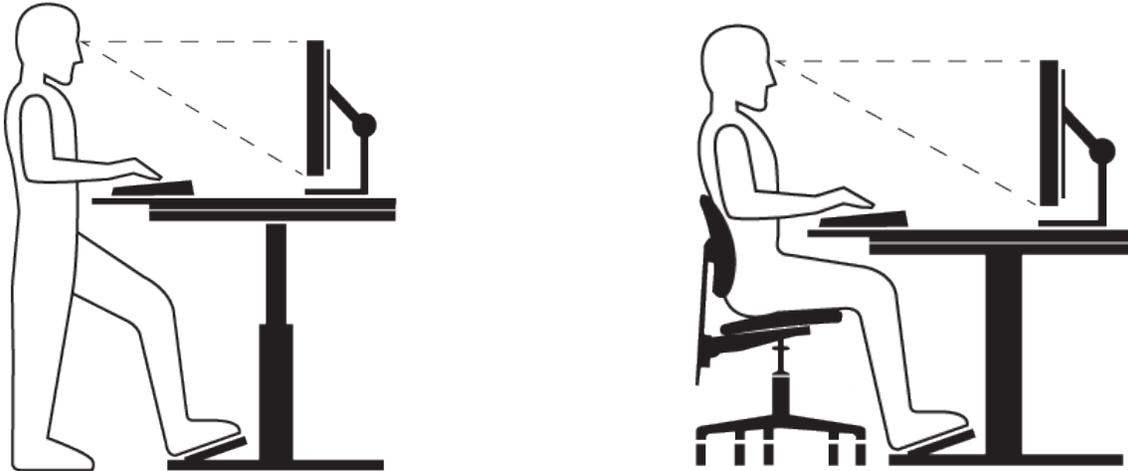
Telephones, staplers or other objects should be located within easy reaching distances to prevent excessive stretching.

Extension, phone cords, mouse cords etc., should be arranged to prevent trip hazards.

TELEPHONE

Should you frequently talk on the telephone consider using the speaker option on the phone or wearing a headset.

Pictorial View of a Sit/Stand Computer Workstation



RECOMMENDATIONS

Whether sitting or standing for prolonged periods of time there are health concerns. It is recommended that you switch between sitting or standing at regular intervals.

When switching to a standing position there is a “working in” period for the body to adjust to the extra physical demands of standing. Start with short periods of standing and increase the length gradually.

Standing or sitting; it is recommended that you take a posture break every 20-30 minutes and move for 2 minutes. Standing alone does not accomplish sufficient blood circulation to the muscles.

Develop greater movement variety in your workplace by adopting some of these healthy lifestyle choices while in the workplace:

- Walk to the printer or water fountain
- Stand for a workplace meeting
- Take the stairs instead of the elevator
- Park further from work and enjoy a refreshing walk