



EWI Works celebrates 10 years!

by: Lorel Cook, Office Administrator, EWI Works



Celebrating ten years of success and heading full steam ahead into the next century, opportunities abound for EWI Works and our ability to deliver only the best in ergonomic consulting to our clients. In March, we opened a second office in Calgary to increase service and availability worldwide. By April, we went high-tech, fully utilizing the Internet to provide easy access to additional ergonomics assistance and information. Already in place is an online self-assessment, an office workstation guideline tip sheet, and our most recent addition, an electronic newsletter. This quarterly publication provides interesting articles and useful tips on ergonomics and workplace safety. View it on our website at www.ewiworks.com or to receive an email copy, send a subscription request to lcook@ewiworks.com. Finally, our online training programs is another exciting service to watch for. With this cutting-edge technology, EWI can extend our recognized custom designed ergonomics training around the globe!



This is only a sample of what EWI Works is in the process of developing to further support organizations in their health, safety and business endeavors. Constantly striving to discover the most innovative solutions, we look forward to bringing continued success for ourselves and our clients in the future.

Meet the Consultants

**Linda Martin, BSC, OT, MEDES
President**

Before establishing Ergo Works Inc. (parent company to EWI Works) in 1991, Linda was an ergonomist with the Worker's Compensation Board (WCB) in Edmonton, Alberta and also worked at the Calgary General Hospital as an occupational therapist. Linda holds a Master's Degree in Environmental Design, and is an expert in design reviews and assessments in various stages of forestry, mining and oil and gas industries. Professional memberships include: Alberta Association of Registered Occupational Therapists; Canadian Association of Occupational Therapists; Association of Canadian Ergonomics; and Human Factors and Ergonomics Society in the United States. She is also a Canadian Certified Professional Ergonomist and holds American certification with the Board of Certified Professional Ergonomists.

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Office Ergonomics

by: Heidi Robinson, Ergonomics Consultant, EWI Works

What is Office Ergonomics?

Ergonomics is the science that addresses human performance and well-being in relation to the job, equipment, tools and the environment. The effects of poor office ergonomics can include work-related musculoskeletal disorders (e.g. carpal tunnel syndrome, back injury), visual fatigue, headaches, or work-related stress. Approximately 62 percent of all incidents in the United States are due to repetitive motions, excluding low-back disorders (BLS, 1995). These disorders may result from poor office ergonomics set-ups in both the work and home office environment. Implementation of good ergonomics minimizes discomfort and injuries in the workplace, optimizes the benefits of fully adjustable furniture for workers, increases worker morale, lowers absenteeism and also increases performance levels.

Are we meeting current Ergonomics Standards?

The new CSA Standard Z412, Guideline on Office Ergonomics, published in December, 2000,

provides a valuable tool for organizations who are either seeing a rise in work-related reports of discomfort or injuries or are moving or upgrading the office furniture and layout.

Considering ergonomics upfront in the design process of new designs or layouts can often reduce costly retrofits as well as improve user acceptance and user satisfaction. The CSA Standard Z412 proposes a nine-step systems approach, which includes:

- 1) Identifying the risks for ergonomics injury.
- 2) Seeking organizational involvement.
- 3) Identify workers' characteristics.
- 4) Determining the job demands, job design and organization of work.

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Office Ergonomics (cont.)

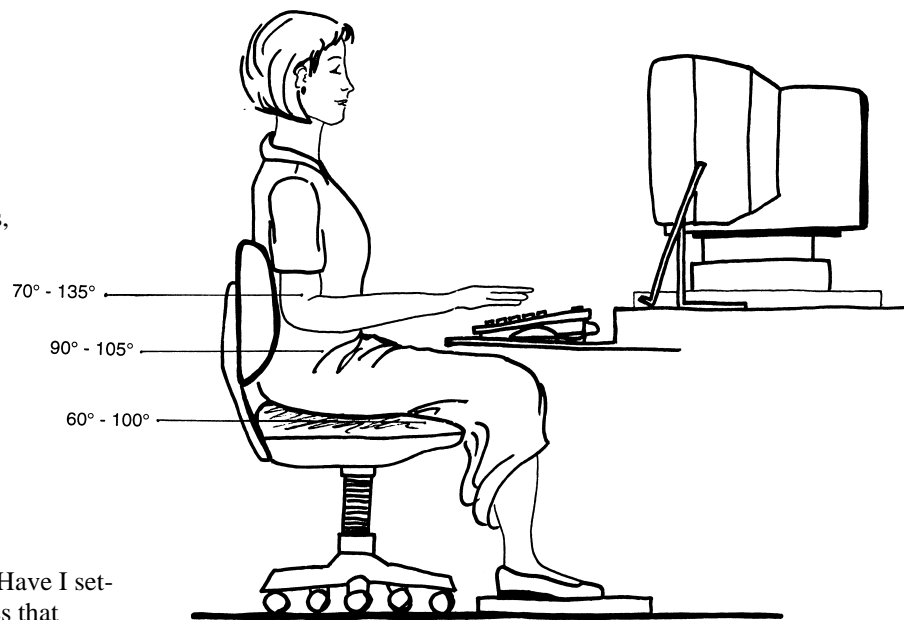
- 5) Planning the office layout.
- 6) Planning the environmental aspects of the office environment.
- 7) Considering the design of individual workstation (including specifications for chairs, work surfaces, footrests, monitors, keyboards, and other office equipment).
- 8) Reviewing the design changes through mock-ups and user trials.
- 9) Identifying ergonomics education and training needs.

Each section includes an appraisal form that assists in the determination of potential concerns.

Am I Set-up Correctly?

One of the most frequent questions that we are asked is: "Have I set-up my workstation correctly?" There are general principles that include: having the mouse and keyboard at the same level, placing the monitor directly in front of you, maintaining a good seating posture with an upright upper body, relaxed shoulders, elbows by your side, legs parallel to floor, and feet flat on the floor. The picture above right shows a good workstation set-up.

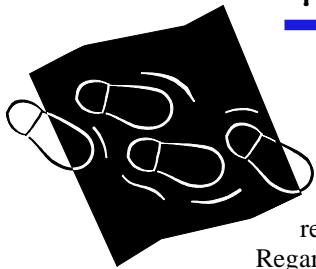
Not only is it important to set-up your workstation correctly, it is important to change your posture and take micro-breaks. Due to the nature of work in an office, it isn't always possible to get up out of your seat as frequently as our body needs us to. It's important to take exercise micro-breaks and adjust your posture in your seat whenever



possible. Micro-breaks need not be long lasting, in some cases a few seconds, and can be taken between calls. It is important that we make adjustments when we can to allow us to continue working without discomfort throughout the day and enjoy our time away from work.

Heidi has worked as an Ergonomic Consultant with EWI Works for two and a half years.. Her article, "Office Ergonomics" appeared in the Alberta Call Centre Association's Newsletter this year.

Foot Care & Foot Wear



An ounce of prevention....

From calluses to crushed bones, foot injuries are an unfortunate reality at home and the workplace.

Regardless of the work environment, foot injuries account for approximately 20 percent or more of all disabling injuries and two out of three workers claim they suffer from some form of a foot problem. Fortunately, the key to a reduction in foot injuries or problems is paying careful attention to foot comfort and safety.

If the shoe fits....

Feet take the brunt of the work in day-to-day activities, bearing the burden of several hundred tons of force each day. A good fitting shoe helps alleviate foot discomfort or fatigue and protects feet from injury. The fit and requirement of shoes varies depending on the foot shape, the activity in which the footwear is required, or if the wearer is a man, woman or child.

by: Lorel Cook, Office Administrator, EWI Works

Buying Tips

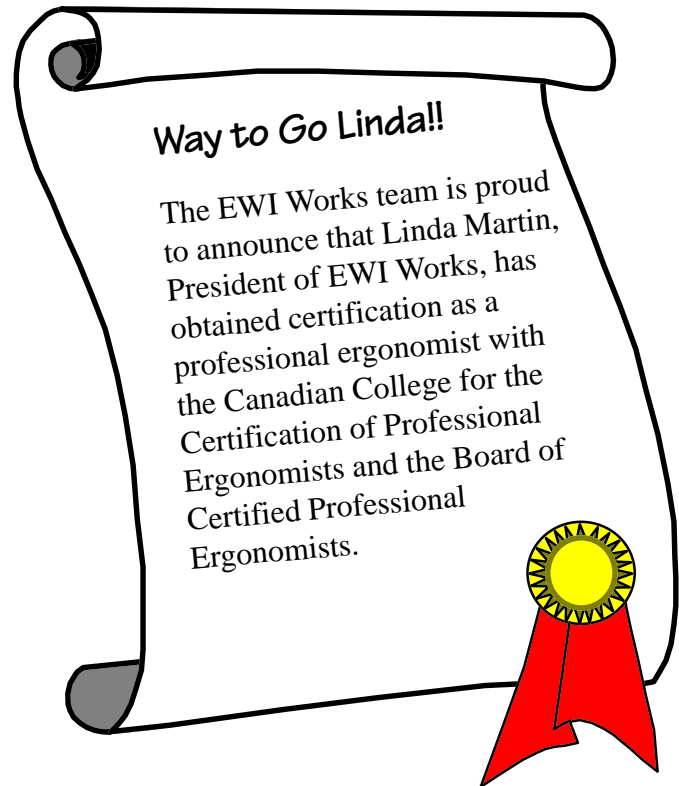
- Buy shoes that are comfortable when you first try them on in the store.
- Measure both feet (they differ in size) while standing and buy shoes to fit the bigger foot.
- Fit shoes so the widest part of the foot corresponds to the widest part of the shoe.
- Buy shoes in late afternoon when feet are usually swollen to maximum size.
- If properly fitting shoes are unavailable, get advice from a doctor.
- Select a shoe with leather uppers, stiff heel counter, appropriate cushioning and flexibility at the ball of the foot.
- Consider shock-absorbing insoles if your job requires walking or standing on hard floors.



Foot Care & Foot Wear (Cont.)

Protecting your feet at work

- **Workers exposed to foot hazards must use protective footwear that is certified by the Canadian Standards Association (CSA Standard “Protective Footwear”, CAN/CSA-Z195-M92).**
- A steel toecap should cover the whole length of the toes from the tips to beyond the natural bend of the foot.
- Use a soft pad covering the edge of the toecap to increase comfort.
- A toecap cutting into the foot means the size or style is incorrect.
- Choose sole thickness and upper material according to the hazards, flooring and individual characteristics of the worker’s foot. Remember that electrical hazards require rubber or cork heels and soles and no metal parts.
- A steel mid-sole should be flexible to allow the foot to bend.
- Use shoes made of rubber, plastic or vinyl in areas of chemical spills or sanitary contamination.
- Non-slip footwear will not completely prevent the wearer from slipping on every surface type.
- Wear insulating overshoes over work footwear.
- Wear insulating muffs around the ankles and over the top of the footwear.
- Shoes or boots that are treated to repel water will protect from wetness and cold.



Other good practices of foot comfort and safety.

Clear your work area or home from sharp objects that could puncture or cut your feet. Slippery floors and clutter can also cause sprains, twisted ankles or broken bones. Try not to stand for a long period of time in one position to reduce fatigue and inflammation that can lead to rheumatism, flat feet and arthritis.

Regular Care:

- Wash feet daily with soap, rinse and dry, especially between the toes.
- Trim toenails straight across and not too short. Do not cut into the corners.
- Wear clean socks or stockings and change daily.
- Keep your feet warm.
- Use leather or canvas shoes, not synthetic.
- Purchase several pairs of shoes and rotate daily to allow them to air out.
- Avoid dyes or synthetics that can cause or aggravate skin allergies.
- Use foot powder.
- Seek a doctor’s care and make a visit to a podiatrist part of your yearly physical.

The information in this article was gathered from two highly recommended organizations, the Canadian Centre for Occupational Health and Safety and the American Podiatric Medical Association. For more information, visit their Websites at www.ccohs.ca and www.apma.org.

Footcare Quiz...

Your feet help keep you mobile and supports you in staying healthy and fit. Test yourself to see just how healthy your feet and ankles are:

(adapted from the *Foot Health Foundation of America* available online at www.apma.org)

(Circle one answer and add up the points in brackets)

1. Hours spent on your feet each day:

- a. less than 2 (0) b. 2-4 (1) c. 5-7 (2) d. 8 or more (3)

2. Your age:

- a. under 40 (0) b. 41-59 (1) c. 60 or over (3)

3. Your weight:

- a. < 20lbs overweight or at ideal weight (0)
b. 20-39lbs overweight (2) c. 40lbs or + overweight (3)

4. Have your feet or ankle problems prevented you from participating in:

- a. leisure sports/activities a. Yes (2) b. No (0)
b. work activities a. Yes (3) b. No (0)

5. Have you ever received medical treatment for problems with your feet and/or ankles?

- a. Yes (3) b. No (0)

6. Do you regularly wear heels two inches or higher?

- a. Yes (2) b. No (0)

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Meet the Consultants (cont. from page 1)

Heidi Robinson, BSc. Kinesiology, MSc. Ergonomics Ergonomics Consultant

After receiving her Master's in Ergonomics at Loughborough University of Technology in the United Kingdom, Heidi instructed classes in Ergonomics and Human Physiology at the University of Sunderland. Since 1998, Heidi has worked with EWI Works, assisting many industries, particularly in the areas of health care and call centers. Professional memberships include the Association of Canadian Ergonomists (former Secretary and Program Co-coordinator for the Alberta Northwest Territories Chapter Executive), Human Factors and Ergonomics Society and an associate membership with the Canadian Association of Occupational Therapists.

Sharon Goodwin, BSc. Kinesiology, MSc. Ergonomics, G.Cert (Higher Education) Ergonomics Consultant

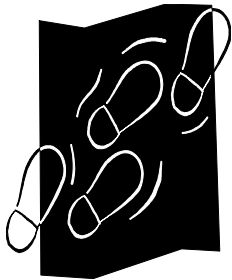
For over a decade, Sharon has had extensive experience in the occupational health and safety field, roles ranging from advising, enforcing and developing OH&S legislation to developing effective health and safety programs and policies. Prior to EWI Works, Sharon was an ergonomic advisor in Australia, assisting the Queensland Department of Education, the Australia Post, and the Department of Social Security. Working out of our Calgary office, Sharon continues to consult organizations and maintains a professional interest in cognitive

ergonomics. Professional memberships include: Association of Canadian Ergonomists, Human Factors and Ergonomics Society (USA), Ergonomics Society of Australia and has associate membership status with the Canadian Association of Occupational Therapists.

Tom Coffyne, BSc. Kinesiology

In addition to working for EWI Works in Calgary, Tom is currently writing his thesis in Environmental Design at the University of Calgary, developing an ergonomic training program for medical laboratories. He has specialized in teaching and developing ergonomic training programs for a number of different industries, including medical, office and telecommunications, and also is interested in ergonomic product design, testing and the set-up and layout of office workspaces. Tom's professional memberships include student member status with both the Association of Canadian Ergonomists and the Human Factors and Ergonomics Society. He is also an associate member with the Canadian Association of Occupational Therapists.

Footcare Quiz (cont.)



7. What types of exercise do you engage in or plan to engage in? (circle all that apply)

- a. walking (1) b. field sports (baseball, golf, etc.) (2) c. winter sports (2)
d. court sports (tennis, basketball) (3)
e. aerobics (3) f. running (3)
g. none (go to question 11) (0)

8. Do you have the appropriate shoes for your sport or sports? a. Yes (0) b. No (3)

9. Do you experience foot or ankle pain when walking or exercising?

- a. rarely (1) b. sometimes (2) c. often (3) d. never (0)

10. Do you:

i. Exercise in footwear that is more than one year old or in hand-me-down footwear?

- a. Yes (3) b. No (0)

ii. Stretch properly before and after exercising?

- a. Yes (0) b. No (3)

11. Do you:

i. Have diabetes?

- a. Yes (3) b. No (0)

ii. Experience numbness and/or burning in your feet?

- a. Yes (3) b. No (0)

iii. Experience pain in the Achilles tendon or heel or have shin splints (pain in the front lower leg)?

- a. Yes (2) b. No (0)

iv. Have corns, calluses, bunions or hammertoes?

- a. Yes (3) b. No (0)

v. Have arthritis or joint pain in your feet?

- a. Yes (3) b. No (0)

vi. Have poor circulation or cramping in your legs?

- a. Yes (3) b. No (0)

Score:

0-20: Your feet and ankles are healthy! Keep up with the care and attention and remember to schedule an annual exam with a podiatrist to ensure long term health.

21-40: *Moderate risk.* You may continue with your normal activities but consider scheduling a check-up with a podiatrist soon, especially if you exercise rigorously or scored points for questions 4,5,9,11, or 12.

41 or greater: *High risk.* Your feet and ankles are at risk for developing long-term medical problems. Schedule a visit with your podiatrist as soon as possible. Pay careful attention to your feet if you exercise before your check-up or see your podiatrist before beginning any type of exercise.

This footcare quiz is not a substitute for a professional exam. If you have a pre-existing medical condition or injury, you should consult a physician before beginning an exercise program.