

# Office Ergonomics

Remembering  
the Basics



**WCB**

Workers'  
Compensation  
Board

*Alberta*

The Workers' Compensation Board - Alberta is a not-for-profit mutual insurance corporation funded entirely by employers. The WCB-Alberta provides cost effective workplace liability and disability insurance to more than one million workers and more than 87,000 employers.

## The WCB's Direction for the Future

The WCB-Alberta sees itself as a key player in keeping Albertans working. We believe that a focus on accident prevention will lead to safer workplaces where fewer illnesses and injuries occur. When they do, we believe well-developed and managed programs and services can lessen their impact on workers, their families and their employers. Workers benefit from safer, healthier workplaces. Employers benefit from increased productivity and lower costs, enhancing their financial stability and contributing to a strong overall economy.

A strong economy invites new and growing businesses - more Albertans working.

### WCB-Alberta Vision

Albertans working – a safe, healthy and strong Alberta.

### WCB-Alberta Mission Statement

WCB-Alberta, working together with our partners, will significantly and measurably reduce the impact of workplace illness and injury on Albertans.

## A Message from the Centre of Excellence

Computers have improved the workplace in many marvelous ways - but they can be a real pain in the wrist. By opening this booklet, you have taken an important step in preventing Repetitive Strain Injury pain and time loss from work. Let the WCB guide you through the basics of office safety and injury prevention.

As part of its five-year Strategic Plan, 1999-2003, the WCB is establishing a Centre of Excellence in Risk Management. Through its Centre of Excellence, the WCB researches, develops and disseminates best practices in the area of injury prevention and disability management. The Strategic Plan is concerned overall with reducing the financial and human impact of work-related injury and illness on Albertans. By finding and implementing best practices in the prevention and management of workplace injury, we are partnering with Alberta workers and employers to reach this important goal.

The introduction of an office ergonomics program is a small but significant step toward reducing work injury in the office. Please read this booklet and take to heart its many useful suggestions. You can be part of achieving our shared vision - Albertans working - a safe, healthy and strong Alberta!

### **Douglas R. Mah**

Executive Lead,  
Centre of Excellence

Repetitive Strain Injuries (RSIs) have become the leading cause of injury in office environments because many jobs are almost entirely computer based.

We believe RSIs are preventable and the health and safety of all staff is a shared responsibility.

This booklet is designed to alert you to the potential for an RSI and to assist you in preventing one from occurring.

The booklet's main objectives are to:

- Create a better understanding of ergonomic principles.
- Identify symptoms and causes of discomfort.
- Guide employees through an evaluation and adjustment of their workstation.
- Outline exercises designed to reduce the risk of injury.

## **Employee's responsibilities**

- ① Have a good understanding of ergonomic risk factors.
- ② Evaluate your workstation and work habits with a buddy, using the checklist.
- ③ Make ergonomic changes as required and follow the booklet's break and exercise recommendations.
- ④ Advise your supervisor if problems persist or additional equipment or expertise is required.

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# Repetitive Strain Injuries

## What is a Repetitive Strain Injury?

An RSI is an injury caused by overusing muscles and bones - the musculoskeletal system - through repeated movement that stresses the system. Other names for RSI type injuries include Cumulative Trauma Disorder and Repetitive Motion Injury.

## What causes RSIs?

RSIs are associated with a number of conditions. These include:

- Rapid repetitive movements.
- Lack of job variation.
- Inadequate rest breaks.
- Awkward work positions.
- Poor tool and equipment design.
- An increase in workload and or/hours.
- Improper use of equipment.
- Monitoring work rates by machine.
- Returning too quickly to repetitive work after extended holidays or illness.
- Compulsory overtime.
- Vibration.
- Forceful or awkward grip.
- Excessive force.
- Changes in the work process.
- Lack of control over work.
- Cold.

## **Symptoms of RSIs**

The symptoms of an RSI injury may range from a “slight sense of discomfort” to “extreme pain”. The symptoms may appear long after performing the activity and the first signs may be subtle and mild. They include:

- Pain, dull ache.
- Loss of sensation (numbness), especially at night.
- Aches/pains which may be worse at night.
- Tingling and burning sensations.
- Swelling around the wrist/hand.
- Dry shiny palm.
- ‘Pins and needles’ discomfort.
- Clumsiness (loss of ability to grasp items, impaired thumb and finger dexterity).
- Muscle weakness and fatigue.
- Muscle spasm.
- Joint restriction/loss of movement.
- A ‘crackling’ feeling when swollen tendons are pressed tightly.
- A cyst-like swelling or node near a tendon or joint known as a ganglion.



## **Stages of Pain**

**Early:** The body aches and individuals feel tired at work, but symptoms disappear during time away from work. The injury does not interfere with the ability to work. The injury will heal completely if dealt with properly at this early stage.

**Intermediate:** The injured area aches and feels weak soon after the start of work, until well after work has ended. The injury will completely heal if dealt with properly.

**Advanced:** The injured area aches and feels weak, even at rest. Sleep is affected. Even light duties are very difficult.



## Risk Factors

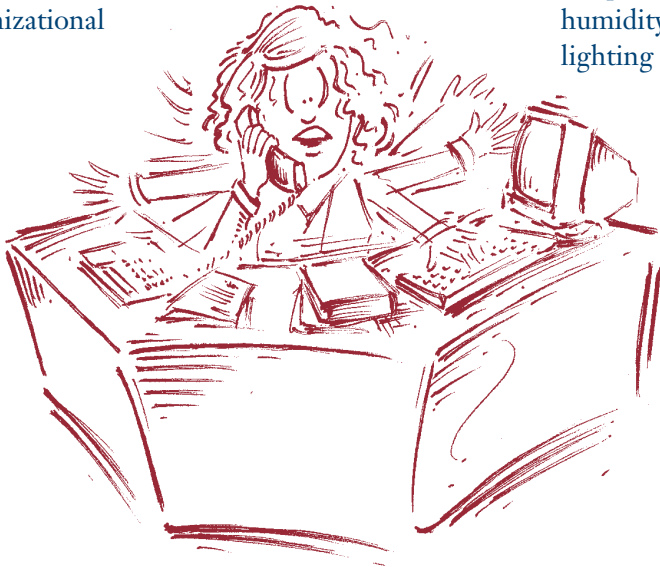
There are factors at work which have an association to RSIs and may trigger the process. Risk factors create conditions conducive to the onset of RSIs. They directly or indirectly influence RSIs and are linked to the physiological process of the disorder.

### Psychological

cognitive  
psychosocial  
organizational

### Environmental

noise  
temperature  
humidity  
lighting



### Physical

#### Force

- striking keys too hard
- grasping too hard
- resting on sharp edge

#### Posture

- awkward or twisting position
- same posture for long time
- reaching for equipment & material
- static loading

#### Frequency/ Duration

- no breaks
- repetitive movements

# Physical

## Force

Force can be described as the magnitude of muscle effort. Examples of excessive force include:

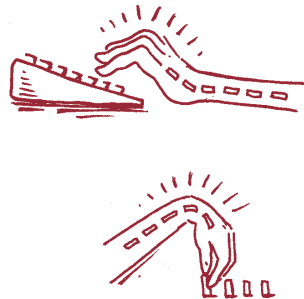
- Pushing down on a pen although little force is required.
- Holding and pushing down on the mouse.
- Pounding down on the keys when keyboarding.

## Posture

Office work forces individuals to adopt poor postures and exhibit behaviours that can cause or aggravate a musculoskeletal disorder.

Examples include:

- Sitting for extended periods of time (more than 3 - 4 hours) may cause pain, aching, swelling, varicose veins in legs and feet, and lower back pain.
- A monitor placed too high /low causing your neck to be bent for long periods.
- Poor wrist positioning.



## Frequency/Duration

The amount of work activities, such as the percentage of keyboarding per day.

# Psychological

## Cognitive (Mental) Effort

Mental effort influences an employee's psychological stress and behaviour. When related to workload, the employee may experience: quantitative overload - which produces acute stress reactions or qualitative underload - which has a negative effect on how an individual perceives their well-being, job satisfaction and health.

Quantitative overload is a significant stressor as it affects how much and how long the employee is exposed to the activity and results in increased 'tenseness' contributing to muscle overload.

## Psychosocial

These factors are the employee's subjective perception of how work is organized, supervised and carried out. Conditions can create an environment of distrust, fear and confusion that could lead employees to perceive more aches and pain.

Perceptions may include:

- Limited career opportunities.
- Lack of job clarity.

## Social Interaction At Work

Your dealings with your co-workers can be a source of social support and reduce negative stress; however, the following can also be the source of stress:

- Group pressure.
- Negative social interaction and relationships.
- Situations that focus on aggressive production, are non-supportive of employees and monitor performance closely cause substantial psychological stress, and increase musculoskeletal and health complaints.

## **Organizational**

### **Work Schedules**

Work schedules (e.g. shift work and rotating shifts) affect a worker's sleep and eating patterns, family and social interaction, and injury incidence.

### **Workload and Overtime**

As an employee's workload increases, there are more work pressures and heightened performance demands. It may also encourage the employee to take risky shortcuts to complete their tasks. This can increase the risk of musculoskeletal disorders.

Overtime also increases an employee's exposure to stressors when he/she may be fatigued and unable to respond at peak efficiency. This further increases the risk of injury.

## Environment

### Noise Levels

This factor is affected by the:

- nature of the work performed,
- operation of equipment; including photocopiers, printers and building ventilation systems,
- material used in floor and wall coverings, and
- quantity and volume of telephone and conversational activity.

Office noise is not loud enough to cause hearing damage.

The objectives of limiting office noise are to:

- prevent interference with verbal communication,
- prevent stress and annoyance, and
- minimize interference with concentration.

### Noise Reduction

- Politely ask others to turn down telephone ringers.
- Forward phones when appropriate.
- Adjust volume level of microphone to tone down loud voices.
- Use conference rooms for conversations that could distract others.

### Temperature and Humidity

Optimum office temperature and humidity is 20-24° C and 30-60%, respectively. Even under these conditions a total of 5% of the population are still either too cold or too warm. Body temperature levels vary with:

- time of the day,
- season,
- diet,
- hormonal changes,
- behaviour (clothing choices, the presence of job stress), and/or
- cultural variables and expectations.

### Increasing Comfort

- Use window blinds to increase or decrease heat from the sun.
- Wear clothing appropriate for office conditions.
- In cold conditions, re-orient work surfaces and seating to avoid drafts and/or use a small heater.
- In warm conditions, drink plenty of water. Fans can be placed in the work area, but do not direct them towards the face.

### Lighting

Office work is not known to cause permanent vision or eye problems although workers report eyestrain; including burning sensation in the eyes, headaches, dry eyes, blurred vision, and eye irritation.

#### **Eyestrain may be caused by:**

- Uncorrected vision.
- Reading material is too far away.
- Poor image quality on monitor screen.
- Poor job/task design resulting in long periods of close work.
- Inadequate lighting, glare and shadows.
- Low humidity which causes eyes to become dry.

#### **Preventing Vision Problems**

- Position work so its easy to see. Ensure proper positioning of documents, monitor, desk height and chair.
- Use legible source documents (preferably write in black pen).
- Ensure adequate monitor image quality.
- Change body positions frequently by varying tasks and using micro breaks and rest breaks.
- Replace flickering fluorescent lights.
- Adjust window blinds to control glare and light levels.
- Use task lights to increase light levels if needed.

# Ergonomics

## What is Ergonomics?

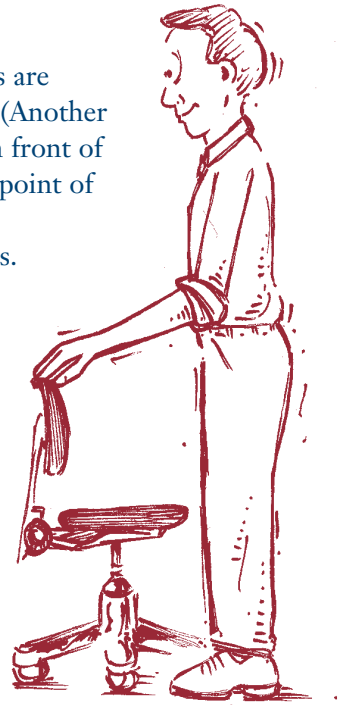
The word ergonomics comes from the Greek words ERGOS (work) and NOMOS (natural law/system).

It is the application of scientific knowledge to the workplace in order to improve the well being and efficiency of both the individual and the organization. (National Research Council of Canada)

## Adjusting Your Work Station

### Sitting Practices

- Adjust the seat of the chair so that your thighs are horizontal and your knees are at right angles. (Another method to check chair height is to STAND in front of the chair and adjust the height so the highest point of the seat is just below your kneecap).
- Rest your back against the backrest at all times.
- Sit so the clearance between the front edge of the seat and the back of your knee is the breadth of two to three fingers to minimize pressure on the underside of your leg. A footrest will elevate your legs and reduce any pressure.
- Sit close to your work.
- Avoid sitting for long periods. Alternate between sitting, standing and walking.
- Keep your back in good alignment and keep your chin tucked in. Adjust the lumbar support so that it rests in the small of your back.



## *Sitting Practices cont'd*

- Keep your head in line with your spine.
- Move your back, neck and shoulders at least every 10 minutes.
- Adjust armrests so the shoulders are relaxed and the elbows at 90 degrees. If your armrests are fixed and do not allow for this posture, do not use them while keying or using the mouse. If armrests are too high/low have them removed.
- Office work is sedentary in nature. In leisure time, balance your work with an active sport or activity you enjoy.

## **Work Surface**

- For working in a sitting position, the work surface should be about the height of the elbows when the arms are hanging straight down when seated.
- Remove all clutter from under the work surface to allow free movement of legs and feet.
- Use a footrest to support the back and legs if your feet cannot rest flat on the floor or if there is pressure on the back of the legs. Contact your supervisor if discomfort persists.





## Keyboard and Mouse

- Adjust the position of your keyboard to keep your wrists straight with elbows at 90 degrees. You can do this by adjusting your chair height or by adjusting the keyboard platform.
- Place the keyboard and mouse within comfortable reach. Try and maintain your elbows at your side.
- Position the mouse next to the keyboard at the same height as the keyboard, or slightly higher, if overreaching is noted.
- Position the keyboard for two-handed keyboarding directly in front of you.
- Position the keyboard for one-handed data entry in front of the keying hand.
- Use the wrist/palm support and/or mouse wrist pad for micro-breaks from keyboarding or using the mouse.
- Avoid resting your hands or wrists on the support during keying and mouse use.
- Use keystrokes as an alternative to mouse use whenever possible.
- Keep the wrist relaxed and straight. Do not lift your little finger or thumb.
- Hold the mouse loosely with the palm and all fingers.
- Apply a light touch while clicking. Do not squeeze mouse or press buttons with excessive force.
- Move the mouse with the whole arm initiating movement from the shoulder.



## Monitor (Visual Display Terminal)

- Position the monitor directly in front of you. If you perform data entry work, consider placing the document holder in front.
- Adjust screen height. Monitors should be at eye level or slightly below eye level.
- Place monitor 18"-30" from eyes. Guide - arm's length rule. If the font is small, move the monitor closer to reduce eye discomfort but not too close because it makes it more difficult to focus or cramps your work space. Consider enlarging font size.
- Adjust monitor brightness and contrast for optimal character definition.
- Tilt monitor down if glare is noted on screen.
- Close blinds during peak periods to minimize glare on the screen.
- Use an anti-glare screen to reduce glare.
- Clean screen at least once per week.
- Dark writing on a light background is easier to read and visually the least tiring.



## Monitor cont'd

- Contact your supervisor if your screen is flickering.
- Change the focus from your screen periodically to minimize eye discomfort.
- See an optometrist every two years.
- Use computer specific glasses if necessary. If you find yourself tilting your head up to see the screen due to bifocal/trifocal use, even after setting the monitor height, you may want to consider computer specific glasses.

## Brightness

Set the monitor brightness similar to the surrounding work area background. Darker surroundings should have a darker screen and brighter surroundings should have a lighter background. Adjust the contrast for improved character visibility and legibility.

## Screen colour

Screen colour is a matter of personal preference in combination with the circumstances the screen is being used. Too many colours creates confusion.

## Colour Use Guidelines

- To avoid confusion, use only four to seven colours.
- Opponent colours (e.g. purple & yellow) are good combinations.
- Avoid colour contrasts such as red and blue as your eyes will tire quickly.
- Avoid blue for small numbers or letters, as the eye has difficulty focusing on this colour.
- White on yellow is hard to read as there is little contrast. Yellow on green creates a vibrating effect on the eye.
- Older operators may need greater brightness levels to differentiate colours.

## Ergonomic Accessories

### Document Holder

- Position document holder at the same distance and same height as the monitor.
- Position the document holder on the same side as the dominant eye.  
To determine your dominant eye:
  1. Make a triangle your fingers.
  2. Focus on an object in the distance.
  3. Close the right eye, then the left without moving your hands.
  4. The eye that keeps the object centered is your dominant eye.

### Footrest

- Use a footrest if your feet cannot touch the floor.

### Palm/Wrist Support

- Avoid resting your hands on the support while actively using the keyboard or mouse. Use during rest periods only.

### Telephone

- Use a headset if you frequently use the phone (for long and/or frequent calls).
- Hold the telephone with one hand, do not cradle it between your ear and shoulder if you do not use a headset.

## Job Design

Is the “what” and “how” of a job. A good job design fits tasks to our physical and mental needs. Components of a good job design include:

- task variety,
- work pace,
- work breaks,
- rest breaks,
- adjustment periods, and
- training & education.

### Task Variety

To increase task variety in a job:

- Re-organize tasks: Alternate tasks within a job to minimize repetition.
- Job enlargement: More variety is added to the job.
- Team work: Each member of the team shares several different tasks.
- Job rotation: People move from one task to another according to a schedule.

### Work Pace

A fast pace of work allows the body little recovery time between repetitive or forceful movements and can increase the chance of increased mistakes. A good work pace should be determined by the joint efforts of management and workers to establish reasonable work quotas, schedules, and goals that meet specific needs.

## Work Breaks

Work breaks are the time between tasks that allow for changes in position. These can help prevent RSIs by allowing us to rest, stretch or change positions when we need to. For continuous computer work, a work break of 5 minutes per hour is generally recommended.



## Rest Breaks

Rest breaks are the time when we STOP working. Besides leaving the workstation, we should use this time to stretch and change positions.

## Adjustment Period

An adjustment period is the time we need to get “in shape” when we return to our job after a long absence/extended illness or when we start a new job. The length of the adjustment period depends upon the type of job.

## Office Exercises

If you are under medical treatment please contact your physician before doing any of the following suggested exercises.

Perform all exercises within your comfort zone.  
Breathe naturally.

Stretch regularly. Stretches should be done slowly and smoothly.  
Do not bounce or strain. If discomfort persists - STOP.

Look away from the screen every 30 minutes and focus on a distant object.

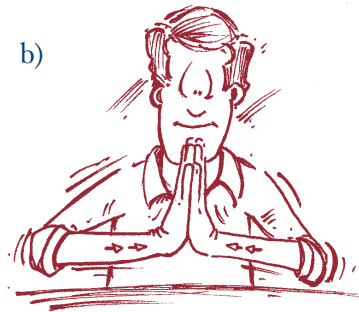
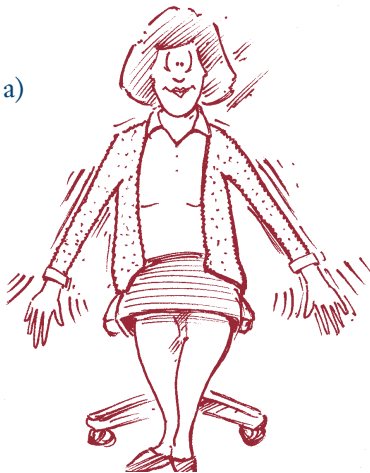
Take regular microbreaks along with your regular breaks to relieve muscle aches, eyestrain and stress.

Use rest breaks to stand up, move around and change activity.

Change positions frequently keeping proper sitting principles in mind.

## Shake Your Arms Wrist/Forearm Stretches

- a) - Drop your arms and hands to your sides.
  - Shake them out gently for a few seconds.
  
- b) - Sitting with elbows on table and palms together, slowly lower wrists to table until you feel a stretch. Be sure to keep palms together throughout the stretch.
  
- c) - Keeping elbow straight, grasp involved hand and slowly bend wrist down until you feel a stretch.





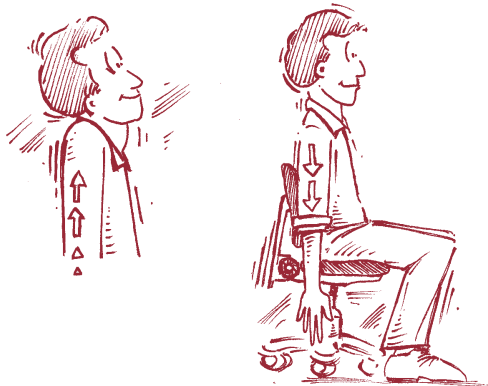
## Shoulder/Arm Stretch

- Reach arm across chest, grasping opposite shoulder with the opposite hand.
- Gently pull the elbow across the chest and towards the body.
- Hold position for 6-10 seconds when stretch is felt in shoulder.



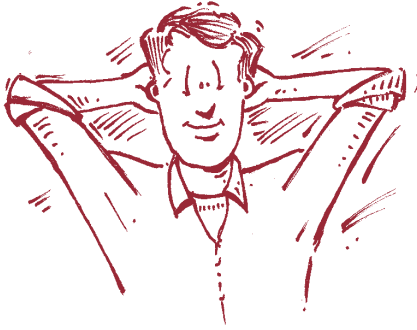
## Shoulder Shrug

- Squeeze shoulders up to ears while letting head relax.
- Follow by stretching shoulders down with fingers to the floor, draw chin in gently. Slowly change from one position to another.



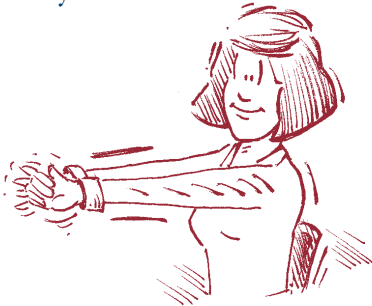
## Executive Stretch

- Lock hands behind your head.
- Stretch slowly backwards in your chair.
- Arch back slightly and gently.
- Hold for 6-10 seconds. Relax for 5-10 seconds.



## Upper Back Stretch

- Extend arms out in front of chest at shoulder height.
- Interlock fingers with palms facing away from body.
- Avoid over-extending the elbow.
- Reach forward while maintaining an upright posture.
- Hold position for 6-10 seconds when a stretch is felt in shoulder/upper back area.
- Raise both arms overhead and hold position for 10 seconds.
- Keep stomach muscles tight to avoid arching the low back.
- Breathe naturally.



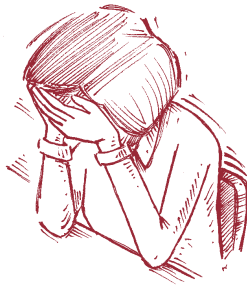
## Neck Stretch

- With an erect posture, draw chin in gently. Bend head to the right so the right ear moves to the right shoulder.
- Hold for 5 seconds. Repeat for opposite side.



## Palming Your Eyes

- Cup your hands.
- While resting your elbows on the desk, cover your eyes without direct pressure on the eyes.
- Hold position for 30 seconds ensuring all light is blocked.
- Breathe naturally.
- Remove hands and open eyes slowly.



# Workstation Checklist For Proper Ergonomic Set-up

## CHAIR

Preferred	Yes	No	If no, do the following
Thigh parallel to floor.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>raise/lower chair</li> <li>add/remove footrest</li> </ul>
Feet on floor.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>raise/lower chair</li> <li>add/remove footrest</li> <li>limit shoe heel height</li> </ul>
2-3 finger breadth between knee and front edge of seat pan.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>use footrest</li> <li>adjust seat depth</li> </ul>
Adequate back support.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>contact supervisor to review</li> </ul>
Shoulders relaxed and level	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>adjust/eliminate arm rest</li> <li>raise/lower chair</li> <li>raise/lower workstation height</li> <li>raise/lower keyboard height</li> </ul>
Elbows at 90°.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>adjust/eliminate armrest</li> <li>raise/lower chair</li> <li>raise/lower workstation height</li> <li>raise/lower keyboard height</li> </ul>

**CHAIR cont'd**

Preferred	Yes	No	If no, do the following
Seat pan well padded.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• contact supervisor to review</li> </ul>
You know how to operate your chair.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• review instruction manual</li> </ul>

**DESK**

Preferred	Yes	No	If no, do the following
Desk height is equal to seated elbow height	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• raise/lower chair</li> </ul>
Adequate space.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• organize desktop surface</li> <li>• remove clutter under desk</li> <li>• arrange cabinets/ pedestal to minimize body twisting</li> </ul>
Minimal reaching above shoulder.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• stand to reach overhead binders</li> <li>• place frequently used binders on desk</li> </ul>
Minimal reaching below shoulder.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• arrange cabinet/ pedestal for easy reach</li> <li>• remove clutter from under desk</li> </ul>

## KEYBOARD

Preferred	Yes	No	If no, do the following
Relaxed arm position during keyboarding.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>raise/lower keyboard height</li> <li>raise/lower chair height</li> </ul>
Wrists in neutral flexion/extension.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>check chair height</li> <li>check keyboard height &amp; tilt</li> <li>obtain wrist support</li> </ul>
Neutral wrist deviation.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>review typing skills</li> <li>obtain split keyboard</li> </ul>
Relaxed fingers.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>relaxation exercises</li> </ul>
Upper torso slouching.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>adjust keyboard height</li> <li>move closer to keyboard</li> <li>adjust chair height</li> <li>adjust posture</li> </ul>
Light touch for keyboard input.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>relaxation exercises</li> <li>review keyboard functioning</li> </ul>

## MOUSE

Preferred	Yes	No	If no, do the following
Easy reach.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>move closer to work surface</li> <li>orient mouse closer to keyboard</li> <li>adjust mouse sensitivity</li> <li>use sensor pad on split keyboard</li> </ul>
Wrist in neutral flexion/extension.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>adjust mouse height</li> <li>use mouse wrist pad</li> </ul>

## MONITOR & DOCUMENT

Preferred	Yes	No	If no, do the following
Head neutral posture.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• raise/lower screen</li> <li>• computer-specific glasses</li> </ul>
Eyes looking forward.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• orient screen in front</li> <li>• orient document in front/beside monitor</li> <li>• check document position for dominant eye</li> </ul>
Monitor - arm's length.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• adjust distance from user</li> </ul>
Upper torso relaxed against chair back.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• move monitor closer</li> <li>• adjust sitting posture</li> </ul>
Document and monitor, same distance and height from eyes.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• adjust monitor and/or document position</li> </ul>
Glare minimized.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• tilt monitor slightly down</li> <li>• adjust monitor brightness</li> <li>• close blinds</li> <li>• adjust lighting</li> <li>• use anti-glare screen</li> </ul>

## TELEPHONE

Preferred	Yes	No	If no, do the following
Neck/head centered.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• headset</li> </ul>
Easy reach.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• place phone closer</li> </ul>

## JOB VARIETY

Preferred	Yes	No	If no, do the following
Visual rest every 30 minutes.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• every 30 minutes look away from the screen and focus on a distant object</li> </ul>
Regular stretch breaks.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• move your back, neck and shoulders at least every 10 minutes</li> </ul>
Alternate task schedule.	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• alternate tasks within a job to minimize repetition</li> </ul>



# Pain and Discomfort Troubleshooting

## Common Symptoms and Causes

<b>Symptoms</b>	<b>Possible Cause</b>	<b>Reference Workstation Checklist</b>
Neck Pain	• Monitor too high, too low or too far	MONITOR & DOCUMENT
	• Chair too low	CHAIR
	• Improper monitor and/or document positioning	MONITOR & DOCUMENT
	• Poor sitting posture and/or lack of position change	CHAIR, JOB VARIETY
	• Keyboard too high	KEYBOARD
	• Bi/Tri-focal use	MONITOR & DOCUMENT
Shoulder Pain	• Armrests too high	CHAIR
	• Desk and/or keyboard too high	DESK, KEYBOARD
	• Poor posture for prolonged period	JOB VARIETY
	• Reaching for overhead binders while seated	DESK
	• Extended reaching for frequently used equipment	DESK, MOUSE, MONITOR & DOCUMENT, TELEPHONE

## Common Symptoms and Causes

<b>Symptoms</b>	<b>Possible Cause</b>	<b>Reference Workstation Checklist</b>
Hand/wrist/ elbow pain	• Keyboard too high/ too low	KEYBOARD
	• Keyboard tilt	KEYBOARD
	• Deviation of wrist during typing	KEYBOARD
	• No wrist support for keyboard and/or mouse	KEYBOARD
	• Lack of task variety	JOB VARIETY
	• Hand tenseness (writing/keyboarding/ mouse usage)	KEYBOARD, MOUSE
	• Resting body part on sharp edge	KEYBOARD, MOUSE
Low back pain	• Prolonged sitting	JOB VARIETY
	• Poor sitting position	CHAIR
	• Chair too high/ too low	CHAIR
	• Poor chair condition/fit	CHAIR
Upper back pain	• Prolonged sitting	JOB VARIETY
	• Desk too high/too low	DESK
	• Chair height	CHAIR
	• Monitor/document too far	MONITOR & DOCUMENT

## Common Symptoms and Causes

<b>Symptoms</b>	<b>Possible Cause</b>	<b>Reference Workstation Checklist</b>
Eyes	• Uncorrected vision	Have eyes checked
	• Glare	MONITOR & DOCUMENT
	• Too much/too little light	MONITOR & DOCUMENT
	• Lack of task variation from monitor	JOB VARIETY
	• Screen flicker and/or colours	
	• Reading material too close/too far	MONITOR & DOCUMENT
	• Low humidity	
Thigh/leg pain	• Poor posture	CHAIR, JOB VARIETY
	• Lack of footrest to support legs	CHAIR
	• Poor seat depth fit	CHAIR
	• Lack of seat padding	CHAIR

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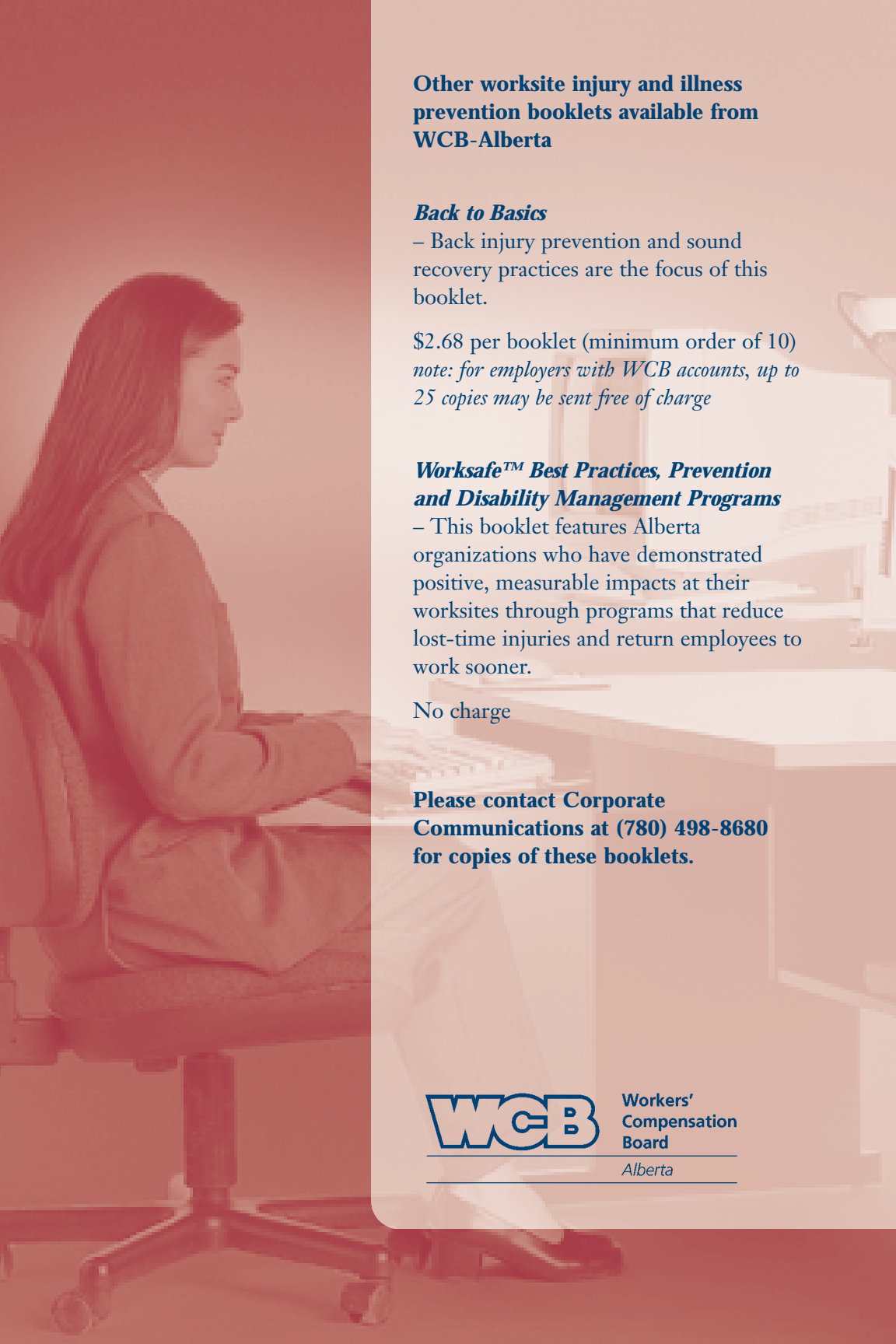
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