



Office Ergonomics:

Think Detection.
Think Prevention.
Think Activity.



Workers'
Compensation
Board

Alberta

The Case of Mr. Z

Mr. Z doesn't wear a hardhat to work. He doesn't lift heavy objects nor does he operate heavy machinery. Actually, Mr. Z wears fairly comfortable clothing, and he doesn't need to exert a lot of physical energy to accomplish his tasks. He sits at his desk from 8 a.m. to 5 p.m., Monday to Friday, and the only machinery he has to operate is a mouse and keyboard. Sitting in his office, Mr. Z is generally safe and secure from injury...

Or is he?



Table of Contents

Introduction	2
Repetitive Strain Injury – What is it?	3
Think Detection. Symptoms and Stages of Injury.....	5
Symptoms of RSIs	5
Stages of Injury.....	6
Risk Factors.....	7
Think Prevention. Ergonomics	11
What is office ergonomics?.....	11
Making Your Workstation Work for You	12
Job Design	18
Think Activity. Office Exercises	21
Workstation Checklist for Proper Ergonomic Setup	25
Pain and Discomfort Troubleshooting	30
Information Sources.....	33

Introduction

Often when we imagine the kind of employees who get workplace injuries, we think of those who need to exert a lot of physical energy on the job or of those who work with heavy machinery. It is true that employees in these work environments may be at greater risk for injury, but office workers are also at risk. Many office injuries are caused by the repetitive tasks that put strain on our muscles and joints.

Whether you work in an office or a warehouse, there are a few things you can do to offset injury:



Think Detection. Listen to your body—early detection and prompt treatment is the best way to correct possible damage. The subtle aches and pains we experience may be our bodies' way of telling us that something needs attention.



Think Prevention. Many injuries are preventable. Performing repetitive tasks in unnatural positions can put strain on our muscles, joints, and tendons, but practicing good work habits and applying ergonomics at work can go a long way in offsetting injuries.



Think Activity. Strengthening our bodies through proper diet and regular exercise can help them handle the work we put them through. Also, try the exercises in the booklet to give your muscles and bones a break.

Inside this booklet you'll find useful tips and information to help you ward off injuries at the office, but please remember this booklet is not meant to instruct you on how to correct an office-related injury. ***If you are experiencing unbearable pain and suspect a work-related injury, see your doctor and notify your supervisor immediately.***

Repetitive Strain Injury – What is it?

Our bones and muscles make up our musculoskeletal system. This system allows us to perform activities such as walking, dancing and swimming—**plus** everything else that requires movement of the body. As strong as this system might be, overuse of the muscles through repeated movements can put stress on your body, causing a **Repetitive Strain Injury** (RSI). Other names for RSI include Cumulative Trauma Disorder and Repetitive Motion Injury.

Unfortunately, many office jobs require that we perform repetitive motions to fulfill our duties. For this reason, RSIs are the most common type of injury found in the office. Tendons are common sites of RSI pain and discomfort, but workers may also experience pain in other areas of the body depending on the tasks performed.

The Case of Mr. Z and the Mysterious Pains



A few months ago, Mr. Z was assigned a large project to complete. Because he wants to make a good impression on his supervisor in time for his next evaluation, Mr. Z has decided to skip breaks and stay late at work to get ahead of schedule.

Over the course of his work, Mr. Z has developed a tingling and numbness in his wrist. It's usually just a dull pain, and it comes and goes throughout the day, but today his usual wrist-rubbing isn't making it feel better. Mr. Z then reaches into his drawer and takes some pain medication. There's no way he's going to allow a little wrist cramp stop him from beating his deadline. These pains are common for his type of work and are no cause for alarm...

Right?



Think Detection: Symptoms and Stages of Injury

Symptoms of RSIs

The first signs of an RSI may be subtle and mild, and the symptoms may appear long after performing the activity. For these reasons, people often ignore the slight aches and pains, but eventually these slight aches and pains can become serious problems down the road if ignored. Symptoms may include:

- Dull aching
- 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, known as a ganglion, near a tendon or joint

Stages of Injury

Based on the intensity of your symptoms, you may be able to determine the stage and extent of damage.

Stage	Symptom Descriptions	Likelihood of Recovery
Early	At work, the body aches and individuals feel tired, but symptoms disappear when away from work. The aches and fatigue do not interfere with the ability to work.	The injury will heal completely if given immediate attention.
Intermediate	The injured area aches and feels weak soon after the start of work, until well after work has ended.	The injury will heal completely if given immediate attention.
Advanced	The injured area aches and feels weak, even at rest or while asleep. Even light duties are very difficult.	It is possible to fully recover from an injury in its advanced stages; however, it may require more work to correct it.



Listen Up!

The earlier you can detect the development of an injury, the better your chance of recovering from it completely!

Warding off discomfort and possible injury could be as easy as making a few simple adjustments to your work environment or behaviour. Use the Pain and Discomfort Troubleshooting guide on page 30 to help you identify ways to alleviate the pain you're experiencing, but remember:

If these adjustments do not alleviate your pains, or if you are feeling pain and discomfort with greater intensity, please consult your doctor immediately. Remember to always speak to your supervisor if you are experiencing pain at work.

Risk Factors

The risk factors closely associated with the development of an RSI are physical, psychological/organizational and environmental factors. Some factors have a more direct influence on RSIs than others.

Physical Factors

Factors such as force, posture and frequency/duration of work are associated with the likelihood of developing an RSI because they stress our joints and muscles. Of all the risk factors, physical factors are debated as having the most direct influence on the development of an RSI.

Physical Factor	What is it and how does it influence an RSI?	Examples
Force	One definition of force is the measure of how much your muscles are working. Using too much force while doing tasks can put strain on our muscles and joints.	<ul style="list-style-type: none">• Gripping a pen or pencil and pressing down heavily on paper while writing.• Squeezing the mouse and forcefully pushing down with your finger as you click.
Posture	Positioning the body in unnatural positions can put strain on areas such as our spine and wrists.	<ul style="list-style-type: none">• Tucking one leg underneath and sitting on it while working at a desk.• Poor wrist alignment while typing.
Frequency/ Duration	Even if we do not use excessive force and even if we have good posture while working, the simple repetition of tasks and movements for long periods of time can cause RSIs.	<ul style="list-style-type: none">• Keyboarding for several hours a day without taking a break.

The Case of Mr. Z and the Office Morale



The younger and newer staff members at Mr. Z's office are good with computers and frequently beat their deadlines ahead of him. While this normally wouldn't bother Mr. Z, his co-workers frequently make him the brunt of jokes, casually stating that he's the "weakest link."

Having his peers laugh at him is a constant source of stress. He feels that everything he does is under scrutiny by his co-workers, so he tends to stay at his desk. Stressed with each passing hour, his posture deteriorates—his nose that much closer to the monitor and his shoulders that much closer to his ears. During dinner at home, he complains to his wife about how tense his muscles are every day, but he can't explain why.

What's causing the tension?



Psychological/Organizational Factors

When we are stressed, we tend to tense up certain muscles and pay little attention to proper posture and movement. Stress, therefore, is an indirect player because it is not the stress that causes injury—it's our bodies' physical reaction to stress that can cause or aggravate an RSI.

Identifying the causes of stress can help you zero in on how to reduce it. Here are a few stressors at work:

COGNITIVE (MENTAL) EFFORT

Sometimes employees are overloaded—that is, they feel they cannot do something because they do not have enough time or the right resources. This causes employees to stress about their ability to perform their tasks well. Decreasing workload and minimizing the need for overtime can alleviate stress.

PSYCHOSOCIAL

An employee's perception of how well co-workers interact, how work is organized and how often he or she is supervised can be a source of stress. Lack of job clarity and general job dissatisfaction can also stress employees.

ORGANIZATIONAL

Varying work schedules, such as shift work, can affect a worker's sleep and eating patterns, as well as his or her family and social interaction. Stress and poor health habits can increase the likelihood of injury at the office. Also, when employees work overtime, they are exposed to longer hours of repetitive tasks, which may increase the chance of injury.

Environmental Factors

Some environmental factors may contribute to the possibility of developing an RSI while others simply reduce productivity.

NOISE

Office noise is not loud enough to cause hearing damage, but limiting office noise can facilitate concentration and prevent stress and annoyance.

TEMPERATURE

Cold temperatures can constrict blood vessels and reduce sensitivity and coordination of body parts.

LIGHTING

Office work is not known to cause permanent vision or eye problems, but sometimes workers can experience eyestrain. Poor lighting makes us work harder to see.

The Case of Mr. Z and the Ergonomics Lesson

One day, Mr. Z's boss brought in a specialist to assess how ergonomically-designed the office was. The specialist explained to the employees that prevention is the best defense against injury. He emphasized the importance of taking breaks and even taught staff some office exercises. He also left simple instructions on how each employee could customize his or her workstation.

"Remember, it only takes a few minutes to make our workstations work for us, and not the other way around," the ergonomics specialist reminded everyone as he left. Annoyed, Mr. Z thought to himself, "A few minutes? A few minutes of fooling around with my chair are a few minutes of valuable work time lost, and I just can't spare them!"

Oh, Mr. Z, when will you ever learn?



Think Prevention: Ergonomics

What is office ergonomics and how does it prevent injury?

The *National Research Council of Canada* defines ergonomics as “the application of scientific knowledge to the workplace in order to improve the well-being and efficiency of both the individual and the organization.” In other words, it is the science of designing the job to fit the worker, not forcing the worker’s body to fit the job.

Although ergonomic principles can help us ward off injury, we may be uninspired to implement them in our everyday habits until our muscles and joints really start to hurt. ***Acknowledge the warning signs as early as possible and do something about it.***

The next few pages can help you customize a workstation that works for you. Implement them in your own workstations and learn about other ergonomic principles that can help you work smarter and safer.

Making Your Workstation Work for You

We are all different. Some people have long arms, others have short torsos, others have long legs—our differences are endless, yet many of our workstations look exactly alike. If we spend several hours a day at our workstations, why not make them fit us?

Your Chair

Since most office work is done sitting at a desk, it is important to adjust our chairs to make them as comfortable as possible.

How do I make my chair fit me?

1. **Chair height.** Adjust the height of your chair so your thighs are horizontal and your knees are at right angles when you are seated. (Or stand in front of the chair and adjust the height so the highest point of the seat is just below your kneecap).

2. **Seat depth.** The space between the front edge of the seat and the back of your knee should be the span of two to three fingers. This will minimize pressure on the underside of your leg.

3. **Back support.** Adjust the lumbar support so it rests in the small of your back.

4. **Armrests.** While seated, bend your elbows to 90 degrees and relax the shoulders. If your armrests do not allow for this position, do not use them while keying or using the mouse. If armrests are too high or too low, have them removed or get a new chair without armrests.

When you're sitting at your desk, consider these points:

THINK REST BREAKS.

Remember that the body wasn't designed to sit in a chair for eight hours a day. Avoid sitting for long periods of time. Try to alternate between sitting, standing and walking while you work, or simply get up and stretch. Aim to move your back, neck and shoulders at least every 10 minutes, or try some of the office exercises illustrated in the **Think Activity** section, starting on page 22.

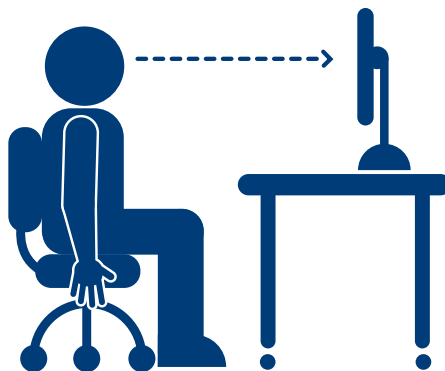
THINK POSTURE.

Keep your feet flat on the floor (using a footrest, if necessary), and lean into the backrest at all times. Keep your back in good alignment and your chin tucked in. This position should feel comfortable and natural.

Your Work Surface

Imagine having the right chair perfectly adjusted to your height, only to have the desk too tall for you. Having these two elements mismatched makes for an ineffective workstation and poor ergonomic design.

Generally, the work surface should be about the height of the elbows when the arms are hanging straight down while seated. If possible, adjust the height of your desk or replace it with one that is suitable for your height.



When customizing your work surface,

THINK CONVENIENCE.

Overreaching above or below the shoulder level can lead to aches and pains. Minimize the risk of injury by having the items you frequently use close at hand. That may mean moving the telephone closer to you or placing frequently-used binders on your desk rather than on an overhead shelf.

THINK TIDY.

Your work surface should be free of clutter. Remove unnecessary files and office supplies and have only what you need. Likewise, your legs should be allowed to move freely underneath the desk. Gym bags, trash cans and boxes have no place under your desk.

Your Computer

Although you've adjusted your desk and chair to fit you, you're not quite finished adjusting your workstation. When positioning your computer's monitor, keyboard and mouse, location is everything.

Where do I place my monitor?

1. Position the monitor directly in front of you when your head is in neutral position and your eyes are looking forward.

2. Adjust the screen height. Monitors should be at eye level or just slightly below eye level.

3. Place your monitor 18" to 30" from your eyes, or use the arm's length rule: your monitor should be just beyond your reach if you extend your arm directly in front of you. If the font is too small, consider enlarging the font size. You should also consider adjusting your monitor brightness and contrast for better viewing.

Here are a few other points you may want to keep in mind about your monitor:

GIVE YOUR EYES A BREAK.

Looking at a computer screen for extended periods of time can cause eyestrain. For a few seconds every hour, focus on something farther away (e.g. a clock 20 ft. away).

Tilt your monitor down if glare is noted on the screen.

If you find yourself tilting your head up to see the screen because of bifocal or trifocal glasses (even after setting the monitor height), you may want to consider computer-specific glasses.

Eye strain can also be caused by uncorrected vision. Be sure to have your eyes regularly checked by a doctor.

Where do I place my mouse and keyboard?

1. **Keyboard.** Position your keyboard so your wrists are straight when elbows are 90 degrees. Adjust your chair height or your keyboard platform to do this.

2. **Mouse.** Position the mouse at the same height as the keyboard. Keep it within easy reach.

When using your keyboard or mouse,

THINK RELAXED.

Holding a mouse and typing on a keyboard shouldn't take too much effort. A light grip on the mouse and a light key stroke will keep wrist pain to a minimum.

THINK STRAIGHT.

Try to keep the wrist relaxed and straight. Use the wrist/palm support for micro-breaks only; resting your hands or wrists on the support during keying and mouse usage can bend the wrist. Also, keep your elbows as close to the body as possible and move the mouse with the whole arm, initiating movement from the shoulder.



It's all in the keys! When possible, use the keyboard instead of the mouse to perform computer commands. Learn the shortcuts for your operating system so you minimize wrist strain...and boost productivity.

Ergonomic Accessories

Document Holder

A document holder can help you minimize head turning and neck pain. To make sure you are using your document holder effectively,

- Place it at the same distance and height as the monitor.
- Place it on the same side as your dominant eye.

Which is my dominant eye?

1. Make a triangle with your fingers.

2. Focus on an object in the distance, looking through the triangle you have created.

3. Close your right eye and take note of the position of the object. Now, open your right eye and close the left one without moving your hands.

4. The eye that keeps the object centred is your dominant eye.

Footrest

If your feet cannot lie flat on the floor, or if your thighs are not parallel to the floor when you are sitting down, consider using a footrest.

Headset

If you frequently use the telephone, consider using a headset that can easily plug into your telephone. If you do not use a headset, hold the receiver with one hand. Do not cradle it between your ear and shoulder.

Job Design

Job design is basically job organization—it defines what jobs need to be done and how. A good job design fits tasks to our physical and mental needs and takes all of the following into consideration:

- Task variety
- Work pace
- Work and rest breaks
- Adjustment periods
- Training and education

Task Variety

Increasing task variety in a job can be done through job enlargement, teamwork and job rotation.

JOB ENLARGEMENT

Workers are given more or different tasks to stimulate interest in the work. This does not necessarily mean more responsibility.

TEAM WORK

Each member of the team shares several different tasks.

JOB ROTATION

Workers move from one task to another according to a schedule.

Work Pace

A fast pace of work does not allow the body to recover between repetitive or forceful movements, and it can also increase the chance of mistakes and poor technique. Workers and employers need to discuss reasonable work quotas, schedules and goals.

Work and Rest Breaks

Work breaks allow for changes in position. An example of a work break is the time between moving from a seated position at the computer to filing documents in a standing position.

Rest breaks are the times when we stop working. Besides leaving the workstation, we should use this time to stretch and change positions. Every hour, give yourself a five minute "micro-break". Multiple micro-breaks are sometimes better for you than fewer long breaks.

Adjustment Period

An adjustment period is the time we need to get "in shape" for a new job or for a job we are returning to after a long absence or extended illness. The length of the adjustment period depends upon the type of job.

Training and Education

It is important workers know what is expected of their roles and how to perform their tasks safely. Improper technique can result in devastating injuries.

The Case of Mr. Z and His Stubborn Habits



Mr. Z's deadline was fast approaching. Consumed by his work, Mr. Z hadn't even noticed the visitor at his door. The ergonomics specialist had unexpectedly paid Mr. Z's office a visit to follow-up with the employees. He quickly noted Mr. Z's poor posture. "Do you ever notice soreness in your wrist and shoulders at the end of the day?" he asked Mr. Z. "Judging by the way you're working, I wouldn't be surprised."

Together, Mr. Z and the specialist practiced some office exercises to help alleviate some of the tension in those areas. Mr. Z admittedly felt better, but he scoffed at the idea of wasting time doing exercises at work. He'd never had to do them before, and he wasn't about to start doing them now.

A few weeks later, Mr. Z was startled awake because of severe pain in his wrists. He finally realized things were worse than he thought. After speaking with Mr. Z and assessing the damage, a doctor concluded that Mr. Z was suffering from an RSI and prescribed he stay home from work for a couple of days. Mr. Z was horrified by this idea...

If he stayed home, it would be impossible to beat his deadline!



Think Activity: Office Exercises

Not only do proper diet and regular exercise help strengthen our bodies and contribute to mental alertness, they also help our bodies spring back from injury much faster.

Done frequently and properly, the following exercises can help relieve joint and muscle tension and offset injury.

A few things to remember about doing 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, and breathe naturally.
- Stretches should be done slowly and smoothly. Do not bounce or strain. If you feel discomfort, STOP.

Wrist/Forearm Stretches

1. Drop your arms and hands to your sides. Shake them out for a few seconds.



2. Sit on a chair with elbows on a table in front of you. Bring palms together as you slowly lower wrists to the table until you feel a stretch.



3. Straighten one arm in front of you, palm down. Using the hand of the other arm, slowly bend your hand down until you feel a stretch. To intensify the stretch, make a fist with the hand of the outstretched arm. Switch arms.



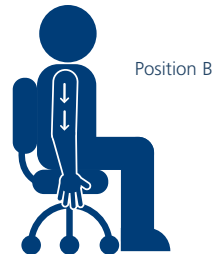
Shoulder/Arm Stretch

- Reach one arm across the chest, grasping the opposite shoulder.
- With the other arm, gently pull the elbow across the chest and towards the body until you feel a stretch.
- Hold this position for six to ten seconds.



Shoulder Shrug

- Let the head relax as you look straight ahead.
- Slowly squeeze your shoulders up towards your ears. Hold for one to two seconds (Position A).
- Stretch shoulders by extending fingers down to the floor, gently drawing in the chin (Position B).
- Repeat slowly, changing from Position A to Position B.



Executive Stretch

- Lock your hands behind your head.
- Stretch slowly backwards in your chair.
- Arch your back slightly and gently.
- Hold for six to ten seconds. Relax for five to ten seconds. Repeat.



Upper Back Stretch

- Extend both arms out in front of chest at shoulder height. Do not overextend the elbows.
- Interlock fingers, palms facing away from the body.
- Maintaining an upright posture, reach forward with the arms until you feel a stretch in the shoulder/upper back region. Hold for six to ten seconds.
- Raise and stretch both arms overhead, keeping arms extended and fingers interlocked. Keep stomach muscles tight to avoid arching the low back. Breathe naturally and hold for ten seconds.



Neck Stretch

- Sitting up straight, draw the chin in gently.
- Gently and slowly bend your head towards your right shoulder until you feel a mild stretch on the left side of your neck.
- Hold for five seconds and repeat on the other side.



Palming Your Eyes

- Cup your hands.
- While resting your elbows on a desk or table, cover your eyes with one hand and overlap with the other to ensure all light is blocked. Do not put direct pressure on the eyes.
- Breathe naturally as you hold this position for 30 seconds.
- Remove hands and open eyes slowly.



Workstation Checklist for Proper Ergonomic Setup

Chair

Preferred	Yes / No	If no, do the following
Thigh parallel to floor when seated	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Raise/lower chair height• Add/remove footrest
Feet on floor	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Raise/lower chair height• Add/remove footrest• Limit shoe heel height
Two to three finger breadth between knee and front edge of seat pan	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Use footrest• Adjust seat depth
Adequate back support	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Contact supervisor to review
Shoulders relaxed and level	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Adjust/eliminate arm rest• Raise/lower chair height• Raise/lower workstation height• Raise/lower keyboard height
Elbows at 90°	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Adjust/eliminate arm rest• Raise/lower chair height• Raise/lower workstation height• Raise/lower keyboard height
Seat pan well padded	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Contact supervisor to review
You know how to operate your chair.	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Review instruction manual

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"> • Raise/lower chair height
Adequate space	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Organize desktop surface • Arrange cabinets to minimize body twisting
Minimal reaching above the shoulder	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Stand to reach overhead binders • Place frequently-used binders on desk
Minimal reaching below the shoulder	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Arrange cabinets/pedestal to minimize body twisting • Remove clutter under desk

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"> • Raise/lower keyboard height
Wrists in line with forearm	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Check chair height • Check keyboard height and tilt • Obtain wrist support
Neutral wrist deviation	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Review typing skills • Obtain split keyboard

Keyboard, Continued

Preferred	Yes / No	If no, do the following
Relaxed fingers	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Relaxation exercises
Upright torso	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Adjust keyboard height• Move closer to keyboard• Raise/lower chair height• Adjust posture
Light touch for keyboard input	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Relaxation exercises• Review keyboard functioning

Mouse

Preferred	Yes / No	If no, do the following
Easy reach	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Move closer to work surface• Position mouse closer to keyboard• Adjust mouse sensitivity• Use sensor mouse on split keyboard (if available)
Wrists in line with forearm	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Adjust mouse height• Use mouse wrist pad

Monitor and Document

Preferred	Yes / No	If no, do the following
Head neutral posture	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Raise/lower monitor • Use computer-specific glasses
Eyes looking forward	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Position screen in front of you • Position document in front or beside the monitor • Make sure document holder is on the same side as your dominant eye
Monitor is just beyond your reach when you stretch arm out directly in front	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Adjust distance of monitor
Adequate back support	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Contact supervisor to review
Upper torso relaxed against chair back	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Move monitor closer • Adjust sitting posture
Document and monitor same distance and height from eyes	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Adjust monitor and/or document position
Glare minimized	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Tilt monitor slightly down • Adjust monitor brightness • Close blinds • Adjust lighting • Use anti-glare screen

Telephone

Preferred	Yes / No	If no, do the following
Neck/head centred	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Use a headset
Easy reach	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Place phone closer to you

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">• Look away from your monitor and focus on a distant object every 30 minutes
Regular stretch breaks	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Move your back, neck and shoulders at least every 10 minutes
Varying tasks	<input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none">• Alternate tasks within a job to minimize repetition

Pain and Discomfort Troubleshooting

Common Symptoms and Causes

Symptom	Possible Cause	Reference Workstation Checklist(s)
Neck pain	<ul style="list-style-type: none"> • Monitor too high, too low or too far • Chair too low • Improper monitor and/or document positioning • Poor sitting posture and/or lack of position change • Keyboard too high • Bi-/Tri-focal use 	<p><i>Monitor and Document</i></p> <p><i>Chair</i></p> <p><i>Monitor and Document</i></p> <p><i>Chair, Job Variety</i></p> <p><i>Keyboard</i></p> <p><i>Monitor and Document</i></p>
Shoulder pain	<ul style="list-style-type: none"> • Armrests too high • Desk and/or keyboard too high • Poor posture for prolonged period • Reaching for overheard binders while seated • Extended reaching for frequently used equipment or files 	<p><i>Chair</i></p> <p><i>Desk, Keyboard</i></p> <p><i>Job Variety</i></p> <p><i>Desk</i></p> <p><i>Desk, Mouse, Monitor and Document, Telephone</i></p>
Hand/wrist/ elbow pain	<ul style="list-style-type: none"> • Keyboard too high/too low • Keyboard tilt • Deviation of wrist during typing • No wrist support for keyboard and/or mouse • Lack of task variety • Hand tenseness (writing/ keyboarding/mouse usage) • Resting body part on sharp edge 	<p><i>Keyboard</i></p> <p><i>Keyboard</i></p> <p><i>Keyboard</i></p> <p><i>Keyboard</i></p> <p><i>Job Variety</i></p> <p><i>Keyboard, Mouse</i></p> <p><i>Keyboard, Mouse</i></p>

Symptom	Possible Cause	Reference Workstation Checklist(s)
Low back pain	<ul style="list-style-type: none"> • Prolonged sitting • Poor sitting position • Chair too high/too low • Poor chair condition/fit 	<i>Job Variety</i> <i>Chair</i> <i>Chair</i> <i>Chair</i>
Upper back pain	<ul style="list-style-type: none"> • Prolonged sitting • Desk too high/too low • Chair height • Monitor/document too far 	<i>Job Variety</i> <i>Desk</i> <i>Chair</i> <i>Monitor and Document</i>
Eyestrain	<ul style="list-style-type: none"> • Glare • Too much/too little light • Lack of task variation • Reading material too close/too far • Uncorrected vision 	<i>Monitor and Document</i> <i>Monitor and Document</i> <i>Job Variety</i> <i>Monitor and Document</i> <i>Monitor</i>
Thigh/leg pain	<ul style="list-style-type: none"> • Poor posture • Lack of footrest to support legs • Poor seat depth fit • Lack of seat padding 	<i>Chair, Job Variety</i> <i>Chair</i> <i>Chair</i> <i>Chair</i>

It's Your Body—Take Care of it!

You are solely responsible for your body—it's yours to listen to, yours to keep safe, and yours to keep active. This booklet has taught you a little bit about RSIs and how to prevent them through ergonomics. We hope that you will use the tips here to help you work smarter and safer, but more importantly, we hope it has inspired you to take your body's well-being into your own hands.

It's your body—take care of it!

Information Sources

Office Ergonomics Safety Guide, 5th Edition
Canadian Centre for Occupational Health and Safety, 1996

VDT Ergonomics: Upper Extremity Assessment Requires a Holistic Approach
Drake, Mary and Meredith Ferraro. *Work* 8, 1997: 15-28.

Kodak's Ergonomic Design for People at Work, 2nd Edition
Eastman Kodak Company, 2003

Work Related Musculoskeletal Disorders (WMSDs): A Reference for Prevention
Hagberg et. al., Taylor & Francis Ltd., 1995

VDT Ergonomics: Arranging Your Workstation to Fit You
Krames Communication, 1993

Practical Office Ergonomics
The Joyce Institute, 1992

Repetitive Strain Injuries in the Workplace
Women and Work Research and Education Society
Health and Welfare Canada, Health Promotion Directorate, 1991

Notes

The Case of Mr. Z and the Preventable Injury

Mr. Z's RSI could have been avoided had he thought about some of the things we discussed in this booklet:

Think Detection. If Mr. Z had quickly acknowledged the first warning signs in his wrist, he may have avoided time off for rest and treatment later. Taking care of our bodies **now** means listening to them and identifying the causes that make them hurt. Stresses can push our bodies beyond their limit.

Think Prevention. It's important to not only listen to our bodies when they are trying to communicate with us, but it is also important to implement corrective measures in order to prevent future damage. Mr. Z learned the importance of taking breaks and performing exercises regularly, but he did not do them.

Think Activity. Recovery from an RSI is possible, but it takes our commitment to make it happen. Performing preventative office exercises is important, but so is maintaining a healthy and balanced lifestyle outside of the workplace.

Learn from Mr. Z's mistakes—it could mean an injury-free work environment!





Workers'
Compensation
Board

Alberta

\$2.50+GST

WCB-12-07-6000