

Occupational Safety, Health & Environment (OSHE) Bulletin.

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Sharing My Thoughts (SMT) on Health and Safety of Pregnant Employees.

- What Are The Risks For Pregnant Employees?
- What Can You Do To Prevent Harm?
- What Can You Do To Manage Risk?
- What Can Employers Do To Promote A Safe Work Place For Pregnant Women?

What Are The Risks For Pregnant Employees?

Women in their reproductive years make up almost half of all employees. Eighty percent (80%) of women will become pregnant during their working life. Most work during pregnancy, and return to work after their baby is born. Work, during normal pregnancy, is not usually a problem. The changing nature of employment has caused new hazards for expectant parents, including those who do not realize they are pregnant. All employees face some workplace risks to their health. Pregnant women are at even greater risk of harm, not only to themselves, but also to their developing children.

The hazards listed on the **chart below**, increase the risk for adverse pregnancy outcomes including: birth defects; low birthweight; prematurity; and miscarriage. Certain occupations and exposures are linked to specific adverse pregnancy outcomes.

Hazard Type	Hazards	Occupation
Chemical	chemotherapeutic agents, anesthetic gases, metals, organic solvents, pesticides	health-care, research, manufacturing, agriculture, welding, pharmacy, painting, decorating, printing, construction, dry cleaning
Physical	radiation noise, vibration, hot and cold work environments	nuclear power plant, x-ray cold storage; airports
Biological	viruses (Rubella, CMV, parvovirus, HIV), parasites (toxoplasmosis)	health care, personal care, child care, veterinary medicine, teaching
Ergonomic	posture, lifting, bending, repetitive work, rapid pace	nursing, therapy, clerical, assembly-line, warehouse
Psychological	stressful work, shift work, long hours	health care, management, manufacturing
Safety	aggression, violence	police, mental health, pharmacy, health care

What Can You Do To Prevent Harm?

Strict adherence to health and safety standards will reduce harm, but occupational exposure limits are rarely derived with the pregnant worker in mind. Pregnant employees, employers, and physicians need to work together to successfully prevent, and manage risk to the pregnant woman and her unborn child. **Knowledge of the physiological changes that occur during pregnancy helps an employer to prevent unnecessary exposure.** Steps can then be taken to eliminate, or reduce, risk. Awareness and education about risk factors and their effects on the pregnant woman need to occur in all workplaces. The organizational culture also influences the success of wellness, health, and safety strategies. Supportive workplace practices assist healthy women assume responsibility in the workplace. An 'open door' management style will help employees feel free to approach their employer early in pregnancy.



What Can You Do To Manage Risk?

Employees in one workplace may incur different risks than employees in other workplaces because of the characteristics of the workplace, and the type of work. For example, pregnant health care workers may need to alter their schedules if they work long hours, shift work, or are involved in strenuous work. Guidelines for strenuous work during pregnancy have been developed by the Society of Obstetricians and Gynaecologists.

Management of risks for injury to pregnant women and their unborn children follows the same principles as those for all employees. There are some exceptions depending on the stage of pregnancy. Both the employer and the employee have a responsibility to manage the effects of workplace hazards.

The physiological changes associated with pregnancy may alter the susceptibility of the pregnant worker. The fetus is much more susceptible than an adult to injury because of rapid growth and development. The degree of risk, and type of injury, change as a pregnancy progresses.

When assessing risk, previous prenatal history, and present health status need to be considered. Lifestyle may exacerbate the risks that the pregnant worker confronts. It is not always possible to separate the lifestyle and workplace hazards when assessing the risk.

Workplace programs need to approach the pregnant employee in a holistic way:

- prenatal education in the workplace;
- supporting behaviour change;
- establishing wellness practices; and
- working to minimize chemical, biological, and physical hazards.

What Can Employers Do To Promote A Safe Work Place For Pregnant Women?

- **Provide a smoke-free environment.**
- **Ensure good ventilation.**
- **Be flexible.**
- **Offer alternative work assignments for pregnant women involved with: heavy lifting; chemicals; strenuous work; shiftwork; and radiation.**
- **Limit overtime.**
- **Provide prenatal information.**
- **Encourage employees to check Material Safety Data Sheets (MSDS).**
- **Provide protective equipment.**
- **Provide short breaks at least every two hours.**

"Pregnancy-Friendly workplace practices" go a long way toward protecting a mother and her unborn child from unnecessary exposure to hazards in the workplace. As new technologies, products and services are introduced, employers need to be alert to the effects on the reproductive health of employees. Creativity and flexibility in the workplace are key to providing a supportive workplace during an exciting, yet potentially risky, time in the lives of the pregnant worker and her child.

Source: <http://www.pcchu.peterborough.on.ca/RH/RH-health-safety.html>

Workplace Safety

Manual Handling Injuries.

Manual handling injuries are not limited to those sustained by lifting or carrying heavy loads. A person can be injured when manipulating objects in a variety of ways including pulling, pushing, holding or restraining. The object can be anything from an animal to a piece of heavy and odd-shaped equipment.

Good posture and lifting techniques can help reduce the risks, but research indicates that making changes to workplace design is the most effective way to prevent manual handling injury.

Identifying the hazards

Some factors in the workplace may increase the risk of an injury occurring. These hazards can be identified in different ways:

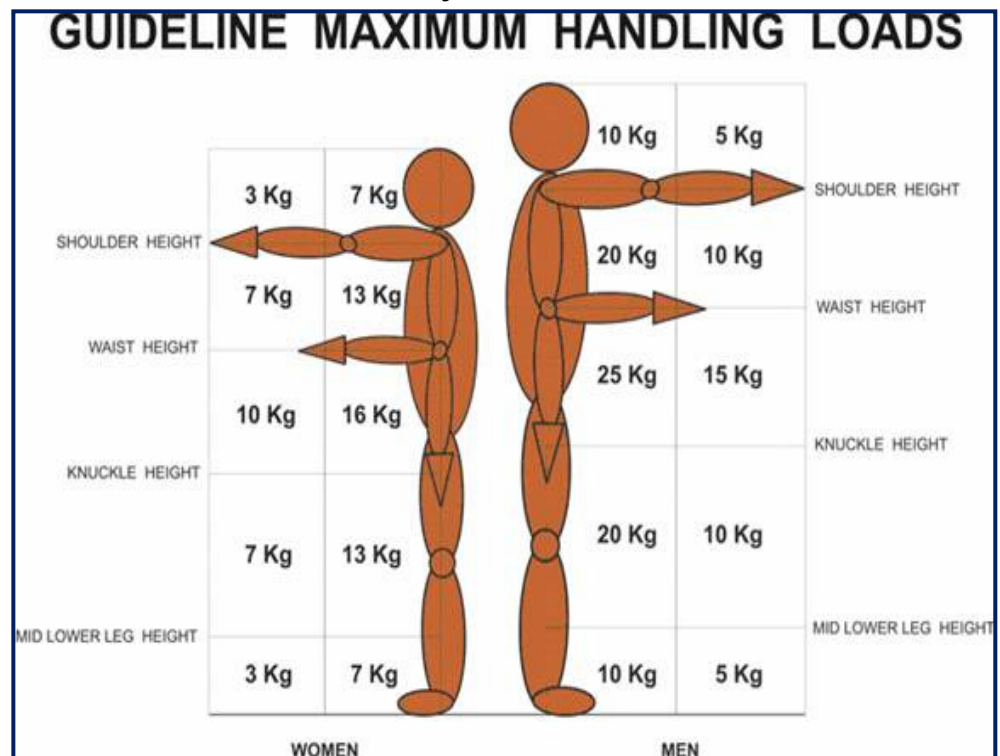
- ✓ Walk through the workplace and look for potential hazards.
- ✓ Talk over risk factors with workers.
- ✓ Check through injury records to help pinpoint recurring problems.
- ✓ Regularly monitor and update risk identification.

Typical risk factors include:

- **Type of work** – working in a fixed posture for a prolonged period of time can increase the risk of injury.
- **Layout of the workspace** – a cramped or poorly designed workspace can increase the risk of injury by forcing people to assume awkward postures, such as bending or twisting.
- **Weight of an object** – a heavy load may be difficult to lift and carry and can increase the risk of injury.
- **Location of an object** – heavy objects that have to be lifted awkwardly - for example above shoulder height or from below knee level - can increase the risk of injury.
- **Duration and frequency** – increasing the number of times an object is handled or the length of time for which it is handled can increase the chance of injury.
- **Condition of an object** – more effort may be required to manipulate badly designed or poorly maintained equipment.

• **Awkward loads** - loads that are difficult to grasp, slippery or an awkward shape can increase the risk of injury.

• **Handling a live person or animal** - lifting or restraining a person or animal can cause sprains and other injuries.



Reducing or eliminating the risk.

After identifying workplace hazards and controlling the risks, you can do several things to reduce the risk of manual handling injuries. These tips can help reduce injury at home as well as at work. Always be proactive.

Safety suggestions include:

- ✓ **Change the task** - does this task need to be carried out? If so, does it have to be done this way?
- ✓ **Change the object** – for example, repack a heavy load into smaller parcels.
- ✓ **Change the workspace** – for example, use ergonomic furniture and make sure work benches are at optimum heights to limit bending or stretching.
- ✓ **Use mechanical aids** – like wheelbarrows, conveyor belts, cranes or forklifts.



"Don't tell me how to work safely!
I've been at this job for over five
years!"

- ✓ **Change the nature of the work** – for example, offer frequent breaks or the chance to do different tasks.
- ✓ **Offer proper training** – inexperienced workers are more likely to be injured.

Source:

<http://www.betterhealth.vic.gov.au/bhcv2/bhcsite.nsf?open>



Computer Vision Syndrome (CVS): A Growing Crisis in Our Workplaces!

Eyestrain, blurred vision, headaches, and tense muscles are universal complaints among workers who put in long hours in front of computer screens.

Although many computer users, and their employers, figure these annoying discomforts are just something to put up with as part of the job, one million new patients each year are seeking professional help for computer-related eye problems according to the American Optometric Association. Eye doctors, alarmed by the steady stream of new patients, see the potential for an eyestrain epidemic in the 21st century if the problem is not addressed by U.S. businesses. Computer-related vision and eye problems, known as Computer Vision Syndrome (CVS), are already reaching crisis proportions in the workplace.

A study conducted by the National Institute of Occupational Safety and Health indicated that 88 percent of people who work at computers for more than three hours a day suffer from

symptoms of eyestrain. And, the number of CVS sufferers seeking help is on the rise, growing from ten million in 1992 to 15 million in 1995. Good light distribution is accomplished when all of the objects in the field of view have approximately equal brightness. Typically, that is not the case in standard office settings.

What is Computer Vision Syndrome (CVS)?

Computer Vision Syndrome (CVS) is the general term used to describe a variety of vision related symptoms that may be aggravated by regular use of a computer for two or more hours a day.



Most office lighting, which was designed for working on paper on a flat, horizontal desk surface, is about twice as bright as it should be for computer work. If not addressed, Computer

Vision Syndrome (CVS) will continue to raise healthcare costs and deteriorate worker satisfaction and productivity. **The symptoms of CVS can be remedied. Individual lighting control puts the remedy in the computer user's hand. It not only creates a visual environment that is conducive to work, it also minimizes liability and health-related expenses** and saves energy as light levels are reduced.

Therapy for Computer Vision Syndrome

- Making a conscious effort to blink occasionally and to look out a window or at some distant object helps to provide rest for the ciliary muscles of the eye.
- A good rule of thumb is 20-20-20. Every 20 minutes focus on something roughly 20 feet away for 20 seconds. Another option is to close the eyes for 20 seconds to provide the muscles of the eyes to rest.
- Reading glasses will make it easier to focus at close distances. Generally the prescription for computer vision reading glasses is +1.0 to +1.5 added to your normal prescription, and if you do not normally wear glasses, then you may be able to purchase +1.0 to +1.5 reading glasses at a drug store and see if they help reduce the eyestrain of using a computer screen.
- Dry eyes can be relieved with artificial tear solutions, which can be purchased at a drug store without a prescription. Adjust your workstation so that there are no drafts blowing on your eyes, which can compound dryness caused by a reduced blink rate.

To minimise the impact of CVS:

A good rule of thumb is 20-20-20. Every 20 minutes focus on something roughly 20 feet away for 20 seconds. Another option is to close the eyes for 20 seconds to provide the muscles of the eyes to rest.

Remember that **Computer Vision Syndrome** is **a complex of SYMPTOMS**, and an examination by an optometrist or ophthalmologist to confirm that the symptoms are not related to another, more serious vision problem or systemic disease.*****

OSHE News: Baggage handlers to lobby parliament over 23kg maximum bag weight.

Source: http://www.unitetheunion.com/news_events/latest_news/baggage_handlers_to_lobby_parl.aspx?lang=en-gb

Unite members from airports all over the UK will be lobbying their MPs and inviting them to take part in a 'baggage challenge' where **MPs will be invited to lift the heavy bags** baggage handlers are expected to lift on a daily basis.

Unite, the UK's largest union, is calling on the government to put pressure on the Health and Safety Executive to introduce regulation that will prevent injuries. Two years ago the Health and Safety Executive aviation Industry group agreed



to reduce the weight of checked-in baggage from 32 to 23 kilograms per item. The International Air Transport Association (IATA) has also backed the call. However, airlines have refused to implement the new weight limit saying they will only comply if there is an industry-wide approach.

That is why Unite is campaigning to get airlines to introduce **a reduced global standard of 23 kg maximum weight limit for individual bags** taken on planes. The union's Lighten Up campaign's main aim is to reduce back and other injuries suffered by thousands of baggage handlers.

Unite's 'Lighten Up' campaign also highlights the positive effect lighter luggage will have on global

warming. **Lighter bags equal lighter planes resulting in less fuel use and lower carbon admissions.** Unite will also be asking government to fund a public awareness campaign to encourage the travelling public to travel lighter.



B366JR. Alamy Images

OSHE News: (Prolonged) Standing at work leads to health problems, TUC warns.

Around 11 million UK workers could face serious health problems from prolonged standing at work, a report from the Trade Union Congress has warned. The report, published in the TUC's health and safety magazine 'Hazards' says that despite calls for action to be taken about to prevent health consequences for London shop assistants in the

Victorian era, workers today still face similar problems.

According to the union, over 2 million sick days are lost due to lower limb disorders, with nearly 200,000 people reporting lower limb ailments caused or made worse



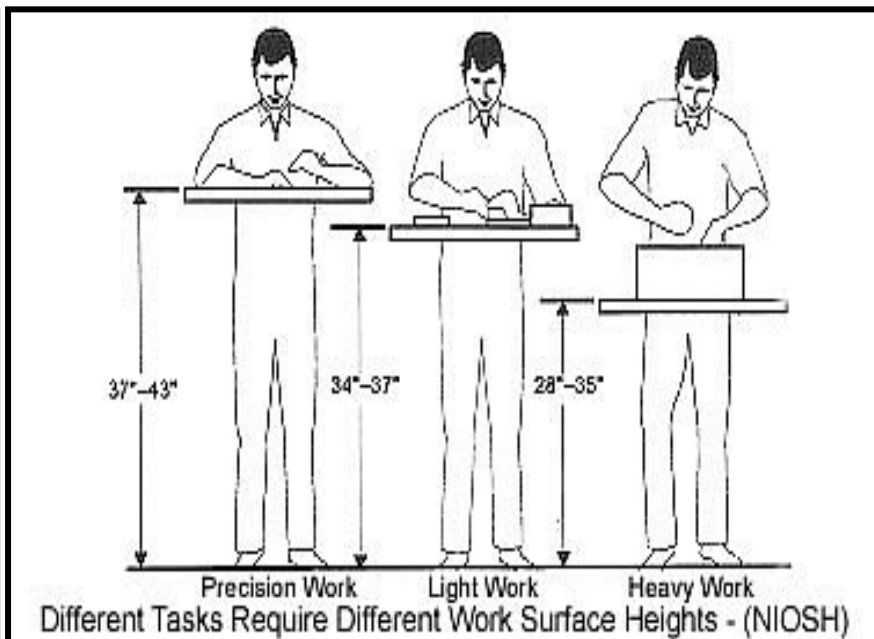
by their job. **The problems include varicose veins, poor circulation, swelling in the feet and legs, foot problems, joint damage, heart and circulatory problems and pregnancy difficulties.**

Commenting on the report, TUC General Secretary Brendan Barber said: "It's quite incredible that some staff today would be better off under

Victorian working conditions. There really isn't any need for the excessive standing on the job that this report highlights. Most jobs don't need people to be on their feet all day and bosses need to get over the fact that someone sat down is protecting their health, not being lazy. **"Simple adjustments to the way millions of people work will save countless sick days each year and stop British workers from, in some cases, dying on their feet."**

A survey of UK union national safety officers, conducted for the report, found that the problem was widespread, with shopworkers, teachers, library staff, warehouse staff, museum workers, engineers, printers and train drivers among those severely affected.

The Editor of 'Hazards' Rory O'Neill said: "You don't walk into work to face daily discomfort from varicose veins, bunions and heel spurs. And protracted periods on your feet are not necessary – **in Sweden, for example, it is rare for workers to be required to stand for more than two hours per day.** Employers in the UK should get off their backsides and provide more seating, more rest breaks and better designed workstations and jobs."

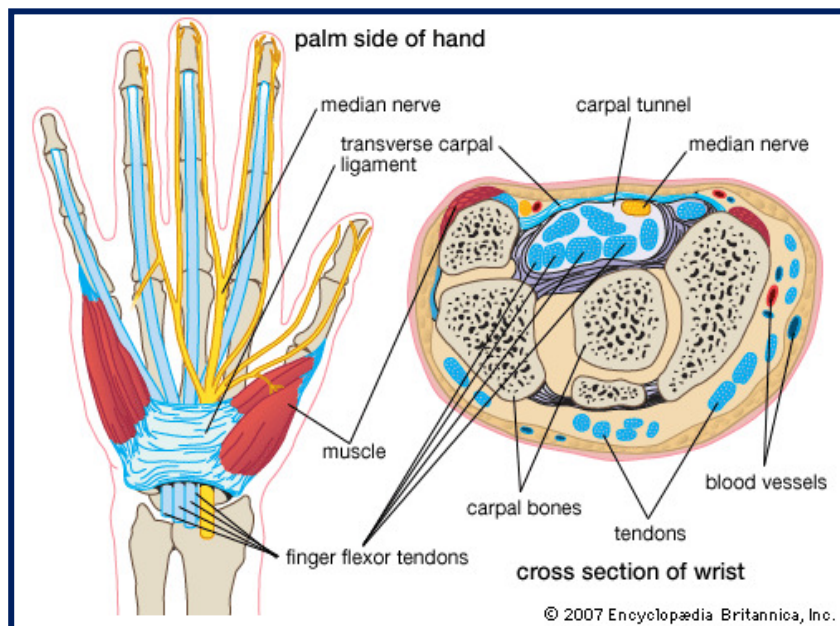


WHAT IS CARPAL TUNNEL SYNDROME (CTS)?

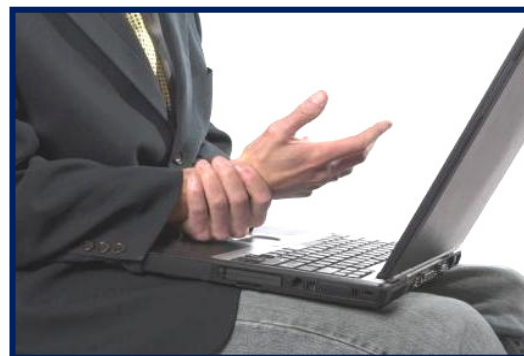
<http://video.about.com/ergonomics/Carpal-Tunnel-Syndrome.htm>

Numbness of the hands, pain of the fingers and tingling of the palms are the most common carpal tunnel symptoms. It often occurs in the parts supplied by the median nerve such as the thumb, index finger, middle finger and half of the ring finger. If your little finger is not affected, this may be a sign that the condition is carpal tunnel

syndrome, because a different nerve than the thumb and other fingers nerves usually control the little finger. Carpal tunnel symptoms often occur in both hands, but they are usually worse in one hand than the other. **You may first notice it at night- people with those disorder can usually fall asleep, but in the middle of their slumber, they are awakened by the pain.**



Those mild carpal tunnel symptoms primarily affect the hand and sometimes the forearm, but they can radiate up to the shoulder. It includes the following: Numbness or pain in



your hand, forearm, or wrist. Shaking or moving your fingers may ease this numbness and pain. Occasional tingling, numbness, "pins-and-needles" sensation or pain. The feeling is similar to your hand "falling asleep." Numbness or pain that worsens while using your hand or wrist, especially when gripping an object with your hand or bending your wrist. Occasional aching pain in your forearm between your elbow and wrist. Stiffness in your fingers when you get up in the morning.



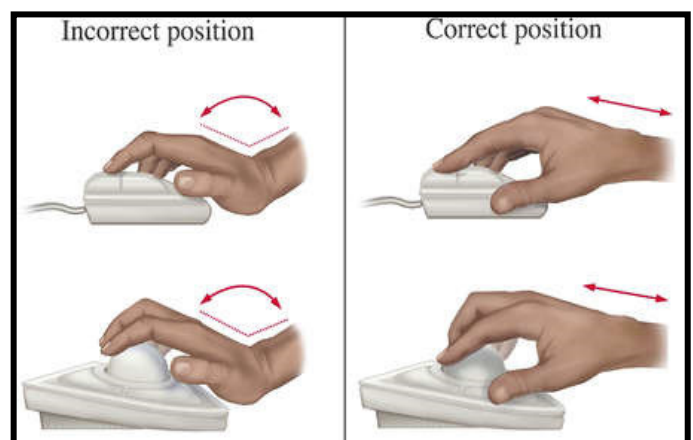
A real Carpal Tunnel Syndrome case (above).

With moderate or severe carpal tunnel symptoms, you may have numbness or reduced strength and grip in your fingers, thumb or hand. It may even be difficult to: Do simple hand movements, such as brushing your hair or holding a fork. You may accidentally drop objects. Pinch an object between your thumb and first finger. Use your thumb while doing simple tasks such as opening a jar or using a screwdriver. With long-lasting carpal tunnel syndrome, the thumb muscles can get smaller and weaker.

Carpal tunnel symptoms may develop gradually over time. It gets shoddier when you do not make a decision to put an end to the activity that



is contributing to the disorder. In its early stage, you may occasionally lose some feeling in your hands. Majority of the slight cases of carpal tunnel syndrome gets better with treatments. Usually there is no permanent damage to the median nerve.



The carpal tunnel symptoms may improve by itself when the following happens: Fluid buildup decreases, such as after pregnancy. You change or stop the activity that has caused your carpal tunnel syndrome. The underlying condition that caused or contributed to your carpal tunnel symptoms has improved. Remember that not all the numbness, pain and tingling are brought about by carpal tunnel symptoms. It may be caused by other disorder so it's best to consult with a specialist to make sure. *****

4 (Four) Workplace Modifications To Minimise The RISK of Carpal Tunnel Syndrome (CTS).

1. Tools and tool handles can be redesigned to keep the worker's wrist in a more natural position.
2. Redesign workstations and tasks to be more conducive to natural positioning of the worker's wrists.
3. Rotating jobs and tasks among workers can reduce repetitive activity and give workers a break.
4. Employers can develop programs that adapt conditions of the workplace environment and the tasks required to the workers' capabilities

A 1-DAY HIGHLY EFFECTIVE “MANUAL HANDLING & ERGONOMICS” COURSE

Delivered by: Assoc. Prof. Abdul Shukor Abdullah

Getting the business benefits

“Manual Handling & Ergonomics” is a **1-day training** course specifically for training those responsible for performing manual handling activities. The course includes a thorough description of the Manual Handling Operations and the Ergonomics principles that should be applied to reduce the risk of manual handling injury. **This approach not only delivers legal compliance, but will help reduce body-related sickness and absenteeism, lower healthcare costs, insurance premiums and compensation claims and improve the productivity of the workforce.**

What skills and information will the participants learn?

After completing this course, participants will be able to:

- Identify potential causes of manual handling back injuries
- Develop ergonomic solutions that can be applied to reduce these injuries
- Encourage correct lifting postures, techniques and principles that minimise injuries to workers
- Use ergonomics principles to re-design manual handling tasks, work areas and work equipment
- Complete a manual handling checklist to prioritise levels of risk

Course content

This course is highly interactive with many different group activities. It uses slides and video (taken from the client site when the course is customised) to reinforce the ergonomics principles presented. A comprehensive reference manual and assessment checklist are provided and participants are given the opportunity to apply the technique to videotaped examples of manual handling tasks.

Course Activities & Methodologies:

- lecture & discussion sessions,
- survey/questionnaire analyses,
- proactive group projects on-site,
- group presentation,
- actual case study on-site, and
- video footages analysis

Key elements of the course are:

Introduction to Ergonomics

- Anthropometry and Anatomy

Types and causes of injuries and illnesses

- Back/lower limb

Ergonomics principles applied to:

- Manual Handling
- Work Movement procedures
- Work area layout
- Seated & Manual Handling workstation jobs
- Standing & Manual Handling workstation jobs

The Manual Handling Operations

- Correct and Proper Handling & Lifting Techniques
- The manual handling risk assessment procedure

Manual Handling Checklists

- Instruction and demonstration
- Practical exercises
- Risk prioritisation process
- Solution design

ERGONOMICS RISK ASSESSMENT (ERA)



WHY Ergonomics Risk Assessment (ERA)?

ERA can have an impact on any of the following measures:

- Reduced Injuries (Healthier Workforce, Increase Morale/Teamwork)
- Reduced Costs (Medical, Repairs, Lost-time, Rejects, Properties Damages)
- Reduced Severity in an event of accident
- Reduced Absenteeism
- Improved Productivity
- Improved Quality
- Improved Wellness
- Ensure Compliance to OSHA 1994

THE TRUTH!

Soft-tissue injury or **work-related musculoskeletal disorder (WMSD)**, is the leading cause of pain and absence from work. In the US about 1 million people take time off work each year. In Canada half of lost time claims are for musculoskeletal disorders and diseases. In today's knowledge economy, in which an increasing number of people are in sedentary jobs, our findings strongly support implementing workplace ergonomic interventions.

THE FACT THAT.....

Many office tasks, laboratories activities and factory operators' actions are repetitive and extended durations; therefore, good

ergonomic practices are especially important in these workplaces' setting throughout the country. **All too often, repetitive tasks, usually at long continuous hours with limited rest periods are performed by workers in awkward body postures and less-than-ideal positions.** Hence, the application of ergonomic principles and effective low-cost changes to equipment can reduce WMSD injuries and the costs associated with claims.

ABOUT THE ASSESSOR.

Associate Professor Abdul Shukor bin Abdullah is a leading researcher, trainer, consultant and speaker on occupational safety, health and environment in the country. He has contributed in assisting more than 1000 Safety & Health Officers (SHOs) in obtaining their certification process with NIOSH @Bangi, Malaysia since 2003. His areas include Ergonomics, Confined Space Analysis, Hazards Identification and Verification as well as Workplace Stress Management. Among his list of clients' companies are Honda (M) Sdn. Bhd., NAZA, Perodua, Proton, TUDM, Petronas, Exxon-Mobil, PDRM, Indah Water, Rapid KL, PLUS and BHPetrol. He won the 2003 UNESCO ICEE Director's Award in Australia for his excellent contributions in Manufacturing Engineering field.

"Injury from accident demands attack on three fronts. The most important is obviously prevention. Next ... is the obligation to rehabilitate the injured. Thirdly, there is the duty to compensate them for their losses". Sir Owen Woodhouse 1967