Occupational Safety, Health & Environment (OSHE) Bulletin.

Edition: DECEMBER 2008

Contents:

'Bringing the OSHE messages to you.'

Sharing My Thoughts (SMT) on

OSHE REVIEWS AND FUTURE (2009) CHALLENGES AT OUR WORKPLACES.

- **As Year 2008 is about to leave us, what are the unsolved issues on OSHE that need our attention?**
- **Is the top management play active roles in supporting the OSHE at work?**
- **Are the OSHE training and learning activities meet the intended objectives?**
- **What are the obstacles to implementing OSHE at work?**

For a start, let us reflect on the statement made by the European Agency for Safety and Health at Work at http://osha.europa.eu/en/press/press-releases/051202_RO/

Changes in society, work organisation and production methods are leading to new types and new combinations of occupational safety and health risks which demand new solutions, concludes a recent survey. The survey was carried out among a panel of over 60 safety and health experts in fourteen European countries and the US. Its results have now been published in a report by the European Agency for Safety and Health at Work.

The report looks into **emerging physical risks**, i.e. risks which are both new (or changing) and increasing. *'The world of work is changing rapidly and work-related health issues are changing too'*, explains Hans-Horst Konkolewsky**,** the Agency's Director. *'Our report sheds new light on these changes by defining top ten emerging physical risks and major trends behind them. With this knowledge EU policymakers and governments will be better equipped to review current prevention measures.'*

The top emerging risks include lack of physical activity, the impact on workers of increasing complexity of new technologies, and a greater vulnerability of low-status workers, e.g. to heat-related risks. A new underlying trend is also visible: work health and safety is increasingly affected by **multifactoral issues**. In places like call centres (at telcos, utilities departments, supermarkets, for instance,) **staff can be exposed to a combination of interacting risks, such as prolonged sitting at desks poorly adjusted to their personal needs, background noise, inadequate headsets, low job control, high time pressure, high mental and emotional demands.** This, in turn, may lead to a combination of health problems, ranging from musculoskeletal disorders, varicose veins, nose and throat diseases and voice disorders to fatigue, stress and burnout.

Company's challenges and obligations as far as health and safety goes is not necessarily to remove all element of risk but to protect you, employees and members of the public as far as is 'reasonably

OSHE Bulletin DECEMBER 2008 is a knowledge sharing initiative created by Assoc. Prof. Abdul Shukor. He can be contacted at prof.shukor@gmail.com and H/P: 0122731434. Your feedback is welcome.

practicable'.

A basic risk assessment has 3 major stages:

STAGE 1: Identifying the hazards and who is at risk from them.

STAGE 2: Decide what course of action is required depending on the degree of risk.

STAGE 3: Implement any necessary precautions and make a record.

Once these are complete a regular review is required to ensure that the original assessment was correct and to account for any changes in the workplace.

There are 3 main divisions of hazards:

1. Environmental hazards: such as pollutions i.e. smoke, grit or dust.

2. Activity hazards: a hazard that may result from a activity a worker must perform i.e. repetitive strain injury.

3. Workplace hazards: a hazard resulting from the location or layout of the workplace.

There are thousands of potential workplace hazards, a list of the easy to overlook ones include:

- **The adequate storage, handling and disposal of potentially hazardous chemicals,**
- **Faulty electrical equipment,**
- **Loose cabling,**
- **Insufficient rest breaks,**
- **Wet, slippery, unclean or badly surfaced floors,**
- **Poorly lit areas,**
- **Inadequate Ventilation,**
- **Poorly designed workstations,**
- **Inappropriate training or procedures.**

To help identify all potential hazards in a small company it is useful to get all staff members involved to help to get a range of views on the risks they may face in their day to day jobs.

Once risks are identified classify them as low, medium or high risk. High and Medium risk problems will need to be dealt with immediately. While low risk may require the implementation of new training, procedures or possibly no action at all if current safety precautions are adequate.

Taking steps to minimise the risk of workplace injury may include replacing old equipment, introducing new procedures, modernising training etc. Any hazardous materials that have been identified may be reduced as a risk by replacing it with a less hazardous substance, using it in lower quantities, introducing protective equipment/ clothing or reducing the amount of time people are exposed to it. Often companies will carry out risk assessments after an accident to ensure that it is not a hazard for which they are liable or that could be a danger to another employee or member of the public.

Safety & Health Risk assessments should be a vital part of your department/division/company practices regardless of whether you are going it alone or hiring in a professional Health and Safety company. They protect you as a company in the short term, in the case of litigation and, in the long term, by protecting the health and well being of everyone who steps foot in your businesses workplace.

Hence, it is obvious that the challenges in OSHE implementation must be carefully addressed and confronted with effectiveness and efficiencies in our mind.

WELCOME TO 2009!

Prof. Abdul Shukor – Editor

OSHE Bulletin DECEMBER 2008 is a knowledge sharing initiative created by Assoc. Prof. Abdul Shukor. He can be contacted at prof.shukor@gmail.com and H/P: 0122731434. Your feedback is welcome.

"Now that I am the Company Safety Manager, Where do I start?" (A Plan for 2009).

Congratulations, you are now responsible for the safety program at your workplace. So, where do you start? Are you familiar with OSHA 1994, NIOSH, DOSH, OSH Manageemnt and all of the different regulating agencies? Do you need an Industrial Hygienist or an Occupational Health Nurse? What about an employee medical surveillance program? Do you have all of your Material Safety Data Sheets? Are you confused yet? Of course you are! Even the most experienced health and safety professionals find themselves confused by all of the technical terminology.

This article is dedicated to the novice health and safety professional. The goal is to provide you with the tools to help you do your job better and smarter. First, let's get started by understanding the "who's who" of health and safety. There are many different professions within the health and safety field. Here is a description of the most common technical specialties. **Do you need these people on your team?**

Industrial Hygienist (IH)

An Industrial Hygienist (IH) is trained to recognize, evaluate, control and prevent workplace exposures. The IH will review all workplace tasks to identify employee exposures to chemicals, noise, asbestos, lead, respiratory hazards, airborne contaminants, radiation, etc. The IH is trained on the proper use and selection of personal protective equipment (PPE) such as respirators, gloves, coveralls, eye, face and head protection. The IH is also educated on the proper design and operation of ventilation systems.

The IH is also skilled to operate many types of testing equipment such as noise meters, air sampling pumps, confined space meters and direct reading instrumentation. This equipment allows the IH to collect samples of workplace contaminants to determine if a hazardous exposure exists. The IH is instrumental in evaluating workplace exposures and making recommendations for improvement.

The goal of the industrial hygienist is to keep workers, their families, and the community healthy and safe. They play a vital part in ensuring that federal, state, and local laws and regulations are followed in the work environment. You may contact DOSH at www.dosh.gov.my to get more information or The American Board of Industrial Hygiene (ABIH) at http://www.abih.org/.

Safety Professional

A safety professional is a person engaged in the prevention of accidents, incidents, and events that harm people, property, or the environment. They use qualitative and quantitative analysis of simple and complex products, systems, operations, and activities to identify hazards. They evaluate the hazards to identify what events can occur and the likelihood of occurrence, severity of results, risk and cost. They identify what controls are appropriate, the cost and effectiveness.

Safety professionals make recommendations to managers, designers, employers, government agencies, and others. Controls may involve administrative controls (such as plans, policies, procedures, training, etc.) and engineering controls (such as safety features and systems, fail-safe features, barriers, and other forms of protection).

Beside knowledge of a wide range of hazards, controls, and safety assessment methods, safety professionals must have knowledge of physical, chemical, biological and behavioral sciences,

OSHE Bulletin DECEMBER 2008 is a knowledge sharing initiative created by Assoc. Prof. Abdul Shukor. He can be contacted at prof.shukor@gmail.com and H/P: 0122731434. Your feedback is welcome.

mathematics, business, training and educational techniques, engineering concepts, and particular kinds of operations (construction, manufacturing, transportation, etc.). May contact NIOSH of Malaysia at www.niosh.com.my for further information.

Occupational Health Nurse (OHN)

Occupational health nursing is the specialty practice that provides for and delivers health care services to workers and worker populations. The practice focuses on promotion, protection, and restoration of worker's health within the context of a safe and healthy work environment. Occupational health nurses make independent nursing judgements in providing occupational health services.

Occupational health nurses encourage and enable individuals to make informed decisions about health care concerns. Confidentiality of health information is integral and central to the practice base. Occupational health nurses are advocates for workers fostering equitable and quality health care services and safe and healthy work environments.

Occupational health nurses are registered nurses (RN) licensed to practice nursing in the states in which they work. It is preferred that nurses entering the field have a baccalaureate degree in nursing and experience in public or community health, ambulatory care, critical care, or emergency nursing. For information regarding Occupational Health Nursing services, please contact WorkCare at http://www.workcare.com/.

Occupational Physician

The Occupational Physician is a licensed MD with special training and experience in the health hazards of workers. A physician who works "in-house" may be located at the employer's site, or at a national or regional headquarters. Consulting or contract physicians may be located at a local health clinic, or in a consulting group. They are responsible for establishing medical surveillance and treatment protocols, and standards of care within an in-house or local medical clinic. The Occupational Physician is often part of a medical team consisting of Occupational Health Nurses and Physician Assistants. Other personnel can include Worker's Compensation Claims Examiners, Case Managers, and Physical Therapists. The Occupational Physician will determine if a worker's injury is occupationally induced or not. Additional tasks that these physicians can assume include Worker's Compensation and disability case management, toxicology and epidemiology consulting, Health and Wellness program development, international and travel medicine, and Human Resources and Benefits support.

Job Hazards Assessment is an on-going year-round activity for a safety manager.

Workers must be educated about potential safety hazards and risks at workplace.

For information regarding Occupational Physicians contact the American College of Occupational and Environmental Medicine (ACOEM) at http://www.acoem.org/. For specific information on Occupational Medicine services, please contact WorkCare at http://www.workcare.com/.

Emergency Preparedness Manager

The Emergency Preparedness Manager is responsible for defining and communicating each employee's role during an emergency. The Emergency Preparedness Manager must ensure that each employee, including Executives, instinctively understands the answer to "What do I do if "x" happened?"

Achieving this goal is no small task. This includes the development, training and testing of emergency action plans, evacuation plans,

OSHE Bulletin DECEMBER 2008 is a knowledge sharing initiative created by Assoc. Prof. Abdul Shukor. He can be contacted at prof.shukor@gmail.com and H/P: 0122731434. Your feedback is welcome.

disaster plans and Executive level incident management plans.

Having a well prepared employee base provides an employer not only with a faster, more effective response to an incident and fewer incident/stress related claims but with ultimately faster recovery time and better image protection. The quicker the business can return to a "pre-incident" business state the better off the company, the employees, the stockholders, and the consumers will be.

The Emergency Preparedness Manager should have a background in Crisis Management/Emergency Management methodology and practices, Safety Regulations, National Fire Protection Association requirements and Contingency Planning. Ideal candidates have had experience responding to and recovering from incidents (man-made and natural) in a business setting (such as those that can occur in heavy industry or manufacturing)

and have extensive experience in developing and implementing company-wide regulatory programs.

Worker's Compensation Claims Examiner

The Worker's Compensation Claims Examiner is responsible for administering all aspects of the injured worker's claim. This includes adhering to all federal and state laws regarding worker's compensation. The Claims Examiner is responsible for processing all paperwork involved in a claim including medical reports, employee statements, litigation files and payments. The Claims Examiner will make contact with the injured worker to explain their benefits under the laws of Worker's Compensation.

Worker's Compensation Case Manager

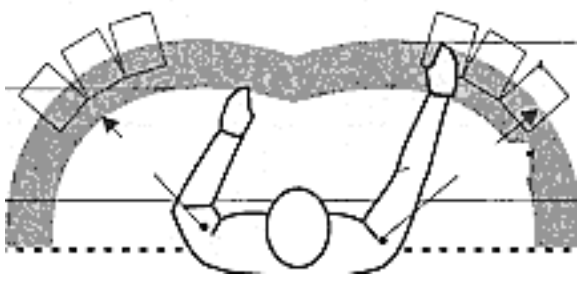
The Case Manager is a medical person, (i.e., a Registered Nurse) who is responsible for managing the medical treatment of a worker's compensation claim. The Case Manager works directly with the claims examiner, the injured worker and the treating physician(s) to ensure that the worker is receiving appropriate treatment to ensure a safe and healthy return to work. The Case Manager is in close contact with the injured worker to ensure that he or she fully understands their injury, their limitations and the treatment plan to return them to productive work.

Environmental Engineer

The Environmental Engineer is responsible for the management of several programs related to environmental protection, most commonly: Hazardous Waste Management and Disposal, Air Quality, Water Quality and Recycling/Reclamation. The Environmental Engineer is trained in the requirements of federal, state and local environmental regulations.

Well, after "meeting" all of these key players within the safety profession, you are probably asking yourself "how do I get all of these specialties within my organization?" The truth is that most employers do not have individuals representing all of the above disciplines. Many health and safety professionals are cross-trained to take responsibility for more than one discipline. The more experienced professionals have pursued multiple certifications so they can be responsible for many aspects of a safety organization (i.e., individuals with both the CIH and CSP). These individuals are invaluable as team members, advisors or as consultants.

I wish all Safety Managers great success as you begin to build your safety organization. I hope you will find excitement and challenges in your new safety career – Prof. Abdul Shukor.



OSHE Bulletin DECEMBER 2008 is a knowledge sharing initiative created by Assoc. Prof. Abdul Shukor. He can be contacted at prof.shukor@gmail.com and H/P: 0122731434. Your feedback is welcome.

A REVISIT TO ERGONOMICS.

What is Ergonomics?
What are the goals of Ergonomics?
What are ergonomics hazards?

ERGONOMICS is a scientific discipline that has been around for many years. Traditionally concerned with factory workers and keeping their work environments safe and efficient, ergonomic professionals have expanded their work to include all types of workers from laborers to office workers, students to seniors.

ERGONOMICS is concerned with how our environment interacts with our work. It also looks for way to adjust our environment to decrease the risks of injury and illness, enhance productivity, and improve the quality of our work life.

The Goals of Ergonomics.
The profession of ergonomics has two main concentrations (which often overlap):

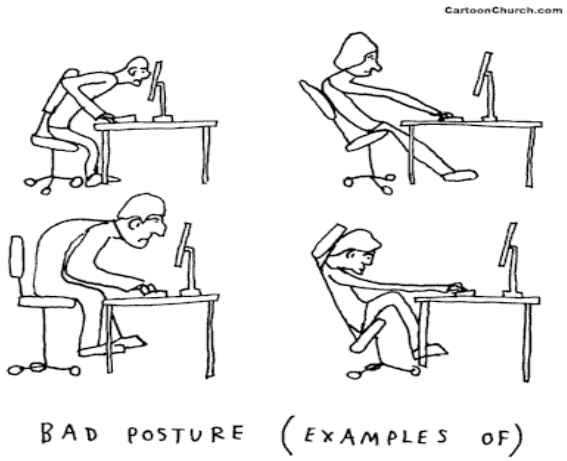
1. Industrial ergonomics - sometimes called occupational biomechanics - is concerned with the physical aspects of work such as force, posture, and repetitive movements.

2. Human factors ergonomics looks as the psychological aspects of work such as mental stress and decision-making.

The components of ergonomics' goals include the following:
- Reduce work-related injury and illness
- Help contain workers' compensation costs for employers
- Improve productivity in the workplace
- Improve the quality of work
- Reduce absenteeism
- Help employers comply with government regulations regarding work environments

Ergonomics professionals include:
- Engineers
- Safety professionals
- Industrial hygienists
- Physical therapists
- Occupational therapists
- Nurse practitioners
- Chiropractors
- Occupational physicians

How Ergonomics Improves Work and Safety
The association between work and injury and illness is centuries old. It is even thought that Ancient Man concerned himself with developing



BAD POSTURE (EXAMPLES OF)

the right tools that allowed for the most efficiency and least amount of discomfort.

Today, we continue to look for ways to improve the relationship between our "tools" and our jobs. One way to do that is to look at the risk factors in the workplace. **These can be divided into 3 areas, namely: physical characteristics, environmental characteristics, and workplace hazards.**

1. Physical characteristics of work:
- Posture
- Force
- Repetition
- Duration
- Recovery time
- Velocity/acceleration
- Heavy dynamic exertion

2. Environmental characteristics of work:
- Heat
- Cold
- Lighting
- Noise
- Whole body vibration (WBV)

3. Workplace hazards:
- Physical stress
- Mental stress
- Workload
- Hours (shifts, overtime)
- Slips and falls
- Fire
- Exposure hazards (electrical, chemical, biological, radiation)

OSHE Bulletin DECEMBER 2008 is a knowledge sharing initiative created by Assoc. Prof. Abdul Shukor. He can be contacted at prof.shukor@gmail.com and H/P: 0122731434. Your feedback is welcome.

OSH AWARENESS, WORK STRESS MANAGEMENT AND ERGONOMICS SEMINARS & WORKSHOPS SUCCESSFULLY DELIVERED BY PROFESSOR ABDUL SHUKOR IN THE MONTH OF NOVEMBER 2008.

Company: BHPetrol (MALAYSIA).
Location: Kuala Lumpur City Centre (KLCC).

The OSH and Work Stress Management Workshops were successfully organised for the employees of BHPetrol. The participants were given the opportunity to learn the elements of OSH and contributing factors of work stress. They were also requested to complete a self-assessment survey.

Company: TM Facilities Sdn. Bhd. Southern Region, (Telekom Malaysia).
Location: MITC, Ayer Keroh, Malacca.

A workshop on Workplace Ergonomics and Work Stress Management was conducted for the senior employees of TM's subsidiary in Malacca. Participants were exposed to the various issues of ergonomics including body pains, discomforts and work hazards.

Special thanks to the hosts' personnel involved in assisting the presenter/facilitator throughout the sessions in November 2008.

The following articles could assist you and your company to plan effective Occupational Safety & Health training and development modules for 2009.

Article 1: 'Stress, overwork and office hazards top workers' safety concerns.'

Source: http://www.africa-news.eu/news/immigration-news-u.k./stress-overwork-and-office-hazards-top-workers-safety-concerns.html

Stress or overwork, injuries and illnesses caused by the poor use of display screen equipment and repetitive strain injuries (RSI) top the list of workers' safety concerns, according to the TUC's biennial survey of safety reps published on 27th October 2008.

Sixty per cent safety reps reported stress or overwork as a concern in their workplace. Concerns about stress are most common in the public sector and in large workplaces, with the highest instances in central government (81 per cent), education (74 per cent) and health services (69 per cent). Ten out the 14 sectors covered by the survey cited stress as the biggest concern.

Manufacturing (noise), construction, distribution and hotels (back pains) and voluntary organisations (display screen equipment) reported other top hazards at work.

Injuries and illnesses resulting from the poor use of display screen equipment has risen from fourth in 2006 to become the second-most common concern, reported by 41 per cent safety reps. Repetitive strain injuries (40 per cent) are another commonly reported hazard.

Other concerns on the increase since the 2006 survey include slips, trips and falls (up six per cent), working alone (up three per cent) and violence and threats at work (up four per cent). Workers in London are most concerned about stress (68 per cent), while workers in Yorkshire and East Anglia are most worried about working alone (38 per cent). Workers in the South East (33 per cent) and London (32 per cent) are significantly more concerned about violence and threats at work than the rest of the UK (26 per cent).

TUC General Secretary Brendan Barber said: "Stress casts a gloomy shadow over far too many UK workplaces. And as the current economic crisis creates more anxiety about job security, stress is likely to increase. Unions and employers must work together to combat this as it can have a huge personal cost to workers and a damaging cost to businesses. Simple office hazards, such as spending too much time fixed on a computer screen or sitting on a badly designed chair, are often overlooked by employers." He said the new survey "shows that they are actually a huge concern to workers and need to be addressed. Thankfully, over 150,000 safety reps across the UK are on hand to help employers prevent these hazards."

Article 2: 'Danger! Young people at work.'

Source: http://www.hazards.org/2young2die/

In Britain, a worker aged between 16 and 24 years old suffers a reported workplace injury requiring more than 3 days off work every 12 minutes of every working day. A young worker is seriously injured at work every 40 minutes. Workplace fatalities in the 16-24 age range occur at a rate of more than one a month.

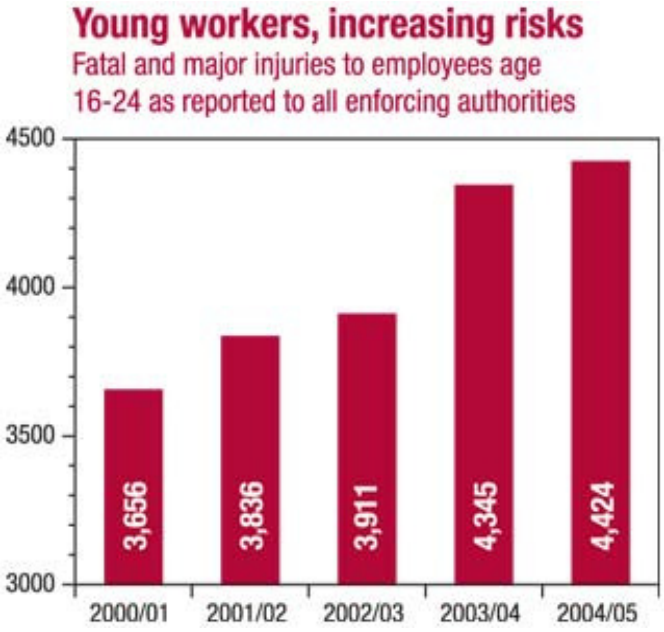
There is evidence work is becoming more hazardous for young workers. The combined total for "fatal and major injuries" in 16-24 year old employees has trended upwards in recent years. The figure is higher now than at any time in the last ten years, and has increased year on year for each of the last five years.

There are over 4 million workers in the UK aged between 16 and 24 years old. **Over half a million of these are only 16-17 years old, have little previous experience of work and yet can be taken from school and placed in most jobs facing most hazards.** They are more likely to be in a first job, more likely to be new to a job and more likely to be in an insecure or temporary job.

They are at the bottom of the workplace pecking order, with little influence, power or knowledge of workplace culture and rights. That can be a dangerous combination at the start of a working life. Add to this the half million school students who go on work placement every year and the quarter of a million who at any one time are on government supported apprenticeship schemes, and that is a lot of young people facing a lot of risks in a lot of workplaces.

A *Hazards* dossier of 10 preventable young worker deaths.

1. **Steven Burke**, killed aged 17, fall from scaffold.
2. **Daniel Dennis**, killed aged 17, fall from roof.
3. **Mark Fiebig**, killed aged 21, fatigue related road accident.
4. **Craig Gowans**, killed aged 17, electrocuted.
5. **Lewis Murphy**, killed aged 18, burned in a fireball.
6. **Ionit Simionica**, killed aged 22, crushed in a crypt.
7. **Christopher Kesterton**, killed aged 16, crushed by a falling structure.
8. **Jimmy Hall**, killed aged 21, crushed by falling equipment.
9. **Ben Pinkham**, killed aged 21, burned in a solvent explosion.
10. **Steven Parsons**, killed aged 18, crushed under a car.



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 over 1000 Safety & Health Officers (SHOs) in obtaining their certification process with NIOSH Malaysia. His areas of training and consultancy include Workplace Ergonomics, Confined Space Analysis, Hazards Identification and Verification as well as Workplace Stress Management. Among his list of clients' companies are Honda, NAZA, Perodua, BATC-UTM, UIAM, MINDEF, RMAF, Petronas, BHPetrol, ExxonMobil, PDRM, TM, Klang Port Authority, RapidKL, PLUS, and DOSH of Malaysia.

THINK SAFETY & ACT PROACTIVELY.

OSHE Bulletin DECEMBER 2008 is a knowledge sharing initiative created by Assoc. Prof. Abdul Shukor. He can be contacted at prof.shukor@gmail.com and H/P: 0122731434. Your feedback is welcome.

THE 2009 ERGONOMICS & WORK STRESS MANAGEMENT WORKSHOP.

A Vital In-house Training and Human Development Session For Your Company.

Overview.

The **'Ergonomics & Work Stress Management'** workshop is about optimizing the relationship between people and the whole work environment. It is expected that the workshop will help participants understand ergonomics and provide them with a range of tools that can used to promote safe and healthy working. The workshop provides participants with a practical insight as to how ergonomic should be applied in their place of work. The workshop is highly practical and is based around exercises or group projects, requiring participants to involve and to apply what they have learned.

Aims.

- To introduce the background and practical ergonomics steps, tools and checklists,
- To give participants, through a programme of structured practical exercises, the opportunity to try-out existing ergonomic issues and requirements at your office,
- To understand and appreciate the relationship between ergonomics and occupational stress,
- To learn the sources and causes of musculoskeletal disorders (MSD) as well as occupational stress or 'stressors'.

Many government's departments and agencies, well-respected and top multinational companies, armed forces and police personnel, staff from various universities and those from the service sectors have benefitted from participating in this valuable workshop in 2008!

Learning Objectives.

After the workshop, participants will be able to:

- Understand how to conduct a simple ergonomics assessment at work,
- Apply ergonomics principles and integrate these into existing work policies and activities,
- Learn and appreciate the factors that lead to the development of MSDs and work stress,
- Work as part of an ergonomics action team to ensure improvements on occupational safety, health and environmental (OSHE).

Who should attend?

Senior/Middle/Junior Managers, Engineers, Executives, HR practitioners, Supervisors and Safety & Health committee members will all gain from attending the workshop.

Workshop's Duration.

2 DAYS on-site.

(Please send your enquiries to **prof.shukor@gmail.com**)

OSHE Bulletin DECEMBER 2008 is a knowledge sharing initiative created by Assoc. Prof. Abdul Shukor. He can be contacted at prof.shukor@gmail.com and H/P: 0122731434. Your feedback is welcome.