

Occupational Safety, Health & Environment (OSHE) Bulletin.

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'Bringing the OSHE messages to you.'

Sharing My Thoughts (SMT) on PROTECTING **YOUNG WORKERS** FROM WORKPLACE HAZARDS.

- Are your young workers suffering from work-related injuries & pains?
- Is your company experience high rate of absenteeism & sick leaves?

In the **October 2008 OSHE Bulletin**, I did highlight on the issue of protecting the young workers from workplace hazards generally. Nevertheless, this vital issue requires the OSHE practitioners to embark on further evaluations on the current state of educating young workers regarding occupational safety, health and environment.

Take a look at these two cases. Jamil (not his real name) was just 18 when he landed a job in the kitchen of a restaurant. After being instructed to pour cooking oil through a filter to clean it, something he had never done before, he asked for a safety apron and gloves. He was told they weren't necessary. The boiling oil spilled, splashing all over him. He suffered third-degree burns on his neck, chest, hands, stomach, groin and feet. He didn't know at the time that he had the right to refuse unsafe work.

Mrs. Choo will never forget being called to the principal's office and told her brother, Alex, was killed at work. "He was backing up on the forklift one day and the ramp gave out underneath him," she says. "The forklift fell and he fell out of it. It ended up landing on him and crushing his chest."

Statistics have shown that young workers are more likely to be injured within **the first month** on the job than any other time. **Slips and falls, over-exertion, being struck by objects, exposure to hazardous chemicals and contact with hazardous materials account for most injuries.** Young



workers are also injured by powerful machines they don't understand, that may not have guards to protect fingers and arms, or that may not be operated safely.

In fact, in my consulting assignment at a world-class organisation whose products are a house-hold name internationally, I met with an 18-year old young male worker. This young worker has several fingers that looked rather unpretty (**see photo, left**). He was also suffering from low back pain due to the nature of his work. Point in case, he just started the work barely a couple of months ago. **Imagine the prolong agony and greater animosity if he is still attached himself to the job for the next 5 or 10 years from now, and without proper protection from the workplace hazards!**

Obviously, serious attentions and actions must be taken to address this worrying scenario at our respective workplaces. Employers should know that young workers must be protected from the risk of injury or illness arising from workplace hazards and pay special attention to the needs of young workers because they lack experience and may not be familiar with workplace procedures. They must provide them with information and training about work hazards and safe work practices that give consideration to their age and experience. Employers must also maintain safe equipment and a safe work environment. Additionally, young workers could injure themselves lifting boxes, stocking shelves or repeating actions over and over. These chronic injuries sometimes are not noticed for years. Similarly, long-term exposure to noise can lead to hearing loss when older. **Some minor injuries are often 'laughed off' as part of the job. They are not. Such an attitude is unacceptable. All risks for injury and illness need to be controlled.**

To protect young workers, employers must know the range of hazards in their workplace, and they must apply the necessary controls to ensure that people are not injured or made ill because of their work. **Common workplace hazards include:**

- ✱ **Manual handling (pushing, pulling, carrying, lifting)**
- ✱ **Work environment (surfaces, temperature, ventilation)**
- ✱ **Machinery (powered and non-powered equipment)**
- ✱ **Heat (burns and scalds)**
- ✱ **Electricity (electrocution)**
- ✱ **Hazardous substances (chemicals, fumes)**
- ✱ **Awkward postures (bending, twisting) – see photo, right.**
- ✱ **Skin-penetrating injuries (knife or syringe injuries)**
- ✱ **Noise**
- ✱ **Confined spaces**



The **Occupational Safety and Health Act 1994 (OSHA 1994) in Malaysia** is very clear about the need to protect people from injury or illness at work. Under this Act employers must:

- ✱ Provide and maintain systems of work that are safe and without risk to health.
- ✱ Arrange the safe use, handling, storage or transport of machinery, equipment and substances.
- ✱ Provide the information, instruction, training and supervision necessary to ensure the health and safety of all workers.
- ✱ Maintain the working environment and workers' facilities in a safe condition and without risks to health.

What if employers fail to meet their legal obligations to protect their young workers? OSHA 1994 legislation provides severe penalties for breaches of the Act. The penalty under the Act is about RM50,000 but there are other costs as well which employers have to bear, including:

- Hiring of replacement staff
- Modifications to the workplace or work systems
- Possible increases in workers' compensation premiums
- Loss of productivity

I wish to emphasise that the top management's vision of any companies is to completely eliminate injuries and illnesses in the workplace. It is a vision that's attainable if every person believes that every injury is preventable and unacceptable. Far too many believe injuries are inevitable. Employers must give young workers the information they need to undertake their work safely. **There is no substitute for thorough training and careful supervision until the new worker is competent to do the tasks required.**

Let us ponder and embark on the necessary steps now.

Abdul Shukor, (prof.shukor@gmail.com)

As companies are preparing for **Year 2009** Training Activities:

5-Step Sequence For Strategic OSHE Training Implementation.

Abdul Shukor Abdullah

Do you know the order in which to train employee groups on OSHE? It's one of many planning elements that can make or break an OSHE training program.

Training is a critical element of a successful occupational OSHE program. Learning opportunities provide people with the means necessary to complete the steps of the OSHE improvement process. These key steps include identifying risk, reducing risk, verifying risk reduction, managing injuries and maintaining program sustainability. Training is critical, especially since it can be one of the biggest investments a company makes in its OSHE agenda. Therefore, it must be well-planned, focused and coordinated. This article describes critical elements for success with the training portion of your OSHE process, and explains the reason for training, whom to train and in what order and the content of each level of training.

Reason for Training

The sole purpose of training in OSHE is to provide people with the skills, knowledge, abilities and tools to accomplish their designated responsibilities. These people form the support infrastructure for your OSHE process. Before you begin training, plan what you want to accomplish. This includes defining the OSHE improvement process and process measures for your site or organization and establishing the key roles and responsibilities of people supporting the process. Use this information to determine the need for training, the learning objectives and training content.



Training Sequence

While all groups play an important role in the total process, the order of training people in key roles has a major impact on the success and sustainability of the OSHE process. Do not begin by providing awareness training for employees. Although this is simple and fun to do, a program based solely on awareness will not survive. Before you paint a wall, you must prepare it to allow the paint to stick, provide good coverage and last over time. Before you train employees, you must prepare the support

infrastructure (key roles) with skills training.

The 5-Step sequence for strategic OSHE training is as follows:

1. Start by educating senior managers (*see photo, above. Senior management team and employees of ExxonMobil (M) Sdn. Bhd. participating in a session with Prof. Abdul Shukor*) to obtain their sponsorship, guide them into leadership roles and establish direction and goals for the OSHE process.
2. Train the person or persons responsible for managing the OSHE process. The role of the OSHE process manager is to coordinate and deploy all elements of the process. To accomplish this, he or she must understand the site's or organization's goals and expectations for the OSHE process, identify supporting roles and develop plans for implementation and communication.

3. Develop the skills, abilities and confidence of OSHE team members, engineering and maintenance personnel, and medical/workers' compensation resources. Effective skills training will establish a small team of experts who can address tough ergonomic challenges brought to them by managers and supervisors. OSHE team members typically have responsibility for assessing **ergonomic risks** and leading improvement efforts. To facilitate these tasks, they must be provided with easy-to-use tools and methods for risk assessment, risk prioritization, root cause analysis and a process for implementing changes. **Engineering and maintenance personnel have a critical role in designing and installing workstations, work environments and tools that minimize exposure to ergonomic risk factors.** They require tools, methods and resources to design equipment within the capabilities of the working population. As a result, they will be able to assist OSHE teams in improving the existing workplace (reactive), and ensure that all future equipment and tools do not pose ergonomic risk (proactive). Workers' compensation managers and medical personnel must be prepared to deal with and manage **work-related musculoskeletal disorders (WMSDs)** when they do occur. Training in current practices will enable them to manage injuries and reduce the time and cost of returning injured employees to work.

4. Provide managers and supervisors with awareness training and coaching to affect work practices and behaviors and to improve workplace conditions. In their supervisory roles, these individuals are best prepared to assist with the implementation of improvements identified by OSHE team members and engineering and maintenance personnel.

5. Provide employees with awareness training to prepare and empower them to identify potential ergonomic issues in their workplace and to adjust the workplace to control the issues or escalate issues to their supervisors for assistance.

(Photo, above shows the team leaders of NAZA Automotive Manufacturing Sdn. Bhd. were discussing the Manual Handling solutions at their manufacturing line during a session with Prof. Abdul Shukor.)



Training Content

Training class structure and content should focus on ensuring that people are successful in performing their roles supporting the OSHE process. This means that different roles require different topics and learning objectives; the course outline lies in the defined responsibilities for each role. Training should provide each person with the knowledge, tools, ability and confidence to meet all of the responsibilities. For example, to meet the responsibilities described above for employees, awareness training should include:

- **Overview of the site ergonomic improvement goals, process and support infrastructure.**
- **Employee responsibilities in the site OSHE process.**
- **Method (and expectation) to identify ergonomic issues in their workstations and tasks.**
- **Specific, easy-to-apply work practices and tools/devices to reduce ergonomic risk at their workstations and tasks.**
- **Expectation to adjust or change a workplace or task to reduce risk.**

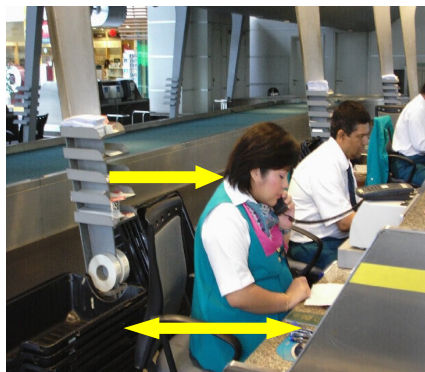
Hands-on applications using familiar examples and case studies are critical for developing skills needed to perform ergonomic assessments, implement engineering controls or behavioral changes and investigate **WMSD** incidents and they keep participants mentally engaged in the training. **Presenting theory and concepts is fascinating for some people, but learning opportunities that allow participants to practice new skills will improve retention, comfort and confidence.** These characteristics help ensure that workplace changes (ergonomic improvements) occur following each training session.

Ladies & Gentlemen,

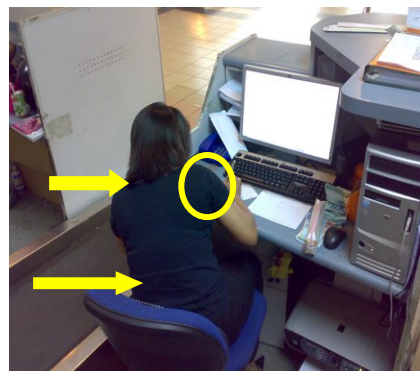
TAKE CARE OF YOUR WORK POSTURE! & **NINE TIPS FOR GOOD POSTURE** AT WORK.



At LCCT



At KL Sentral



At Subang Airport



At LRT-STAR Station



At KTMB Station



At KL Monorail Station

What is POSTURE?

Posture is defined as the way the body is carried. **Correct posture** means carrying your body in a way that puts the least strain on muscles and ligaments. **Poor posture can cause pain in the neck and back, and can sometimes lead to injury.** Making changes to your posture is a great way of improving your overall appearance, as well as your health. Many of the reasons for bad posture can be fixed and others, like pregnancy, go away in time. Some of the reasons are:

- Poor habits - sitting and standing incorrectly

- Weakened muscles
- Obesity – the extra pounds add strain to your skeleton and muscles
- Pregnancy
- Ill-fitting shoes (like high heels)
- Reduced muscle and joint flexibility (this can happen with conditions like rheumatoid arthritis).

Why is good posture important?

Good posture is good for your health in a number of ways. **Standing and sitting with correct posture**

prevents strain and overuse of neck and back muscles, it helps the muscles work more efficiently. Good posture also has other more subtle benefits. When you stand properly, the body tends to look taller and slimmer. Good posture can also make you look more confident. And, we all know, when you look confident, you feel confident. **As most of us are seated at desks for most of the day, it is very important to have correct posture while seated.** Here are nine tips for good posture at your desk.

TIP #1. Know the warning signs of back pain caused by poor posture.

Back pain may be the result of poor posture if the back pain is worse at certain times of day or week. If you experience back pain at certain times of the week, but not at the weekend, this may be the problem.

The signs to watch out for are

- Sudden back pain that is experienced with a new job, a new office chair, or a new car
- Pain that starts in the neck and moves downwards into the upper back
- Lower back and extremities and pain that go away after changing positions while sitting or standing.

TIP #2. Keep active.

As muscles get tired, slouching, slumping, and other poor posture positions occur. This then puts extra pressure on the neck and back.

In order to maintain a relaxed yet supported posture, switch positions frequently. Take a two-minute break from your desk every hour to stretch your limbs.

TIP #3. Keep the body in alignment while sitting at your desk and standing.

Distribute body weight evenly to the front, back, and sides of the feet while standing. While sitting in at your desk, take advantage of the chair's features. Sit up straight and align the ears, shoulders, and hips in one vertical line. **Any single position, even a position with good posture, will tire your muscles.** Leaning forward with a straight back can alternate with sitting back, using the back support of the office chair to take some of the strain from your muscles. Also be aware of and avoid unbalanced postures such as crossing legs unevenly while sitting, leaning to one side, hunching the shoulders and craning the neck.

TIP #4. Increase your general awareness of good posture.

Being aware of posture at work, at home, and at play is a vitally important step towards instilling good posture techniques. This includes making conscious connections between incidents of back pain and what position you were in at the time.

TIP #5. Use exercise to help prevent injury and promote good posture.

Regular physical exercise such as walking, swimming and cycling will help the body stay in good condition, while specific strengthening exercises will help the muscles surrounding the back to stay strong.

There are also specific exercises that will help maintain good posture. A balance of trunk strength with back muscles about 30% stronger than abdominal muscles is essential to help support the upper body and maintain good posture.

TIP #6. Wear supportive footwear when standing.

Avoid regularly wearing high heels, which can affect the body's center of gravity and change the alignment of the entire body, affecting back support and posture.

TIP #7. Remember good posture when moving.

Walking, talking on the phone and typing are all moving activities that require attention to posture. It is important to maintain good posture even while moving to avoid injury. **Back injuries** are especially common while twisting and/or lifting and often occur because of awkward movement and control of the upper body weight alone.

TIP #8. Create physical environments and workspaces that are conducive to good posture.

It does require a bit of time but the results will be well worth it. Undue strain will be placed on the spine unless your office chair, desk, keyboard, and computer screen are in the correct position.

TIP #9. Avoid overprotecting posture

Remember that it is important to maintain an overall relaxed posture to avoid restricting movements by tensing muscles and adopting a stiff posture. For people who already have some back pain, it is a natural tendency to try to limit movements to avoid the potential pain associated with movement.

A 2-DAY MANUAL HANDLING AND ERGONOMICS WORKSHOP AT NAZA AUTOMOTIVE MANUFACTURING SDN. BHD. GURUN, KEDAH. (14-15, 21-22 & 28-29 October 2008 respectively.) Workshop's Facilitator: Professor Abdul Shukor Abdullah.

A 2-day workshop on the importance of proper manual handling and ergonomics principles was conducted by the author at one of the leading national automotive manufacturing company in Kedah, Malaysia. A group of team leaders representing selected units at the company was participated actively throughout the duration of the workshop.

The workshop was organised in three separate sessions which comprised Group A, B and C. Six days were needed to complete the whole sessions.

The workshop was aimed to generate the understanding and greater awareness regarding correct manual handling activities and ergonomics.

The course includes a thorough description of the Manual Handling Operations and the Ergonomics principles that 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.

The participants were given ample opportunities to learn current issues regarding potential injuries and discomforts caused by poor handling of materials around the factory. They were requested to conduct group project at the factory to identify and evaluate existing manual handling hazards and ergonomics risk factors respectively. On the second day, each group was requested to present the findings and propose corrective plans. The management of the factory was formally invited to listen and discuss the findings with the team leaders.

These sessions were regarded as very relevant and successful by the participants. Among the feedbacks received are:

- Opportunity to learn and understand new ways to evaluate safety hazards and ergonomics.
- The workshop was highly relevant to identify existing hazards to the young workers.
- The session enabled the team leaders to exchange information on current challenges and obstacles in implementing corrective plans on safety and health matters for their respective units.

As part of the module delivered, the participants were also required to attend a written test on the topics covered throughout the 2-Day workshop. Results including the marks obtained are sent to the management of the factory for further action.



Above: The team leaders with Prof. Shukor (14 Oct)



Above: Measuring the correct height to avoid bad working postures and back pain for workers.



Above: Discussing the findings on manual handling hazards and ergonomics risk factors.

**FOR FURTHER INFO ON THESE WORKSHOPS
PLEASE CONTACT PROF. SHUKOR.**

OSHE NEWS FROM AROUND THE WORLD.

Work Stress May Increase Breast Cancer Risk.

Researchers Say Risk Rises 30 Percent

<http://www.local10.com/breastcancer/14254296/detail.html>

Women with demanding jobs were more likely to develop breast cancer in a 14-year Swedish study. The work with 36,000 Swedish women started in 1990 with volunteers taking a survey. **By 2004, 767 of the women (about 2 percent) had been diagnosed with breast cancer. Researchers said they found that full-time working women in stressful jobs were 30 percent more likely to develop breast cancer,** but that there was no link between stress and breast cancer in part-time workers. They said in a news release that stress may be linked to an increase in estrogen, which increases the risk of cancer.

Definition of STRESS.

The simplest definition of stress is force that produces physical or emotional tension or strain on the body. If you work at a computer or a desk you're at risk for back pain, carpal-tunnel (wrist) problems, eyestrain and obesity. These are all common symptoms of workplace related stress injuries.



Stress at Work and Its Symptoms.

<http://www.articlesbase.com/health-articles/stress-at-work-and-its-symptoms-401285.html>

Stress at work is not a new phenomenon. These days, in modern lifestyles, the nature of work has gone really stressful. One needs to do a lot in order to stay ahead in competition. Most people don't even realize

that they are undergoing a lot of stress in their life. **Work stress is a type of chronic disease. It is caused by different conditions in the workplace that negatively affect an individual's performance (eg. WORK HAZARDS, BAD POSTURES, POOR WORK ENVIRONMENTS).** This also affect overall well being of body and mind of the person. In certain cases, job stress can even be quite disabling. According to a study, one must go for psychiatric consultation. This will let him or her validate the reason and degree of stress related to work. Sometimes working on a project also causes a lot of stress. The early stages of job stress are not much irritating as it can enhance the performance due to the efforts put in to the whole thing. However, in case, the condition goes unchecked the body faces stress on a regular basis the body tends to get affected adversely.

If you want to know whether you suffer from work stress, here are certain **symptoms** you need to look for:

- **Insomnia or sleeplessness**
- **Family conflict or constant dispute**
- **Lack of mental concentration**
- **Anxiety; Depression; Extreme anger**
- **Frustration**
- **Physical illnesses such as migraine, stomach problems, headaches, heart disease and back problems.**
- **Absenteeism on a frequent basis without any regular reason.**



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 nearly 1000 Safety & Health Officers (SHOs) in obtaining their certification process with NIOSH Malaysia. His areas of training and consultancy include Ergonomics, Hazards Identification and Verification as well as Workplace Stress Management.