Occupational Safety, Health & Environment (OSHE) Bulletin.

Edition: JULY 2009

(Created by: Associate Professor Abdul Shukor Abdullah)

Contents:

Sharing My Thoughts (SMT) on

9 Steps to a Successful Safety Culture at Your Workplace.

- Definition of 'safety culture'
- The set of steps needed to create a 'safety culture' at workplace.
- Roles of the management team and the whole workforce in creating a safety culture.

What is a *safety culture*? One way to put it--"It's the way things are done around here." It's the set of values that management and the workforce use to determine how they act at work. Safety should not be viewed or stated simply as a priority. The priorities of a company can change over time, and even on short notice, but values do not. To say that safety is a priority means that it will change based on the needs or urgencies of the moment and will not always be on the top of your priority list.

Following are steps safety managers can take to make safety a greater value to management and to frontline employees:

- **STEP 1** - View and present safety as a continuous process instead of a compliance requirement.
- **STEP 2** - Look at near-misses or accidents as indicators of a series of connected events that led to the incident, not as a one-time or isolated event.
- **STEP 3** - Integrate safety activities into the safety system, not announce them as a new priority that appears to workers as yet another add-on, flavor-of-the-month initiative.
- **STEP 4** - Make the effort to encourage workers to improve safety performance; watch for improvements and recognize them.
- **STEP 5** - Get employees involved in the safety decision-making process instead of dictating new policies and priorities.
- **STEP 6** - When near-misses or accidents occur, look first at why the safety management system failed instead of looking to place blame. Don't just look at what went wrong, but get into the habit of thinking about the process of recognizing the hazard and finding a way to control the hazard.
- **STEP 7** - Look at accident investigations as action planning, not fault-finding missions.
- **STEP 8** - When instituting a new control, explain to affected workers why they are being asked to change what they normally do, and what success will look like.
- **STEP 9** - Identify all of the "hidden" costs of workplace injuries and illnesses, such as lost workdays, workers' compensation, and replacing a worker, and measure them

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over time. If you can measure it, you can manage it. Make the case to management that these costs can be managed and reduced with a stronger commitment to safety.

Real change in safety performance will come about with a change in the safety culture of an organization. Think about the change in the use of seat belts from 30 years ago to now. What got people to put them on without even thinking about them? Gory accidents? Probably not. It was leadership backing up a change in behavior, and then repetitive education, enforcement, and encouragement. Change in culture requires consistent leadership and repetition. A systematic change in the values of the target audience is needed, not a new priority that comes and goes with funding priorities.

In addition, the company must ensure that an effective management system is existed and implemented at various levels. **An effective management system** should be able to recognize, record, report and reward all levels of employee involvement in order to achieve a sustainable safety culture. The best systems will track involvement at the employee level, as well as at the crew and department levels. Costs for implementing and administrating a program need not be expensive and can actually serve as a means to strict budgetary control.

Another factor to be considered is **the employees' involvement in creating a safety culture**. Together with a professionally conducted survey, a safety culture management system provides a tailored, high-impact platform any company can use to attain greater levels of employee engagement. To the extent that employees are fully engaged in the process of safety, health and environment, companies can expect enhanced performance, quality and profits. Fully engaged workers practice systems-thinking, act as proprietors and "perform in the storm" when required. To develop a world-class safety culture, a company must implement a management system that is bottom-up, with top-down controls, encouraging communication, ideas and initiative at every level of the organization.

Together, we can work towards creating a safety culture

Regards,

Abdul Shukor Abdullah, Author, OSHE Bulletin July 2009

3 strategies to a solid safety culture.

How can your company develop a healthy climate and a sustainable culture that meets the goals for a safe workplace, proper procedures and compliance, effective equipment maintenance and use every single day? According to research performed recently by Towers Perrin-ISR, these three strategies serve as the primary drivers to a solid safety culture:

1. Focus on improving employer-supervisor relations.
2. Empower all employees with enough authority to excel.
3. Recognize teamwork and cooperation at all levels.

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MANAGING VIOLENCE AT WORKPLACE.

An ever-growing concern among safety and health professionals world-wide.

Occupational Health and Safety concerns regarding workplace violence have now caught the attention of legislators, mental health practitioners, employers, and organized labour. Prompted by heinous and well publicized examples of workplace violence, decision makers are quickly becoming aware of the potential for this type of behaviour to take root in almost any organization.

Available research both here and abroad is now clearly suggesting that the definition of "workplace violence" can no longer be confined to physical acts, but should include a wide range of behaviours no less damaging and in some instances the trigger for further, more dramatic acts of aggression.

The landscape of workplace violence now includes "intimidation", "bullying", "harassment" and a host of other behaviours whose only purpose is to isolate and denigrate the intended victim. Victims, who like most of us, come to work never anticipating that we will be the subject of abuse, ridicule or violent threat.

Through applied research and a renewed collaboration between like-minded individuals and organizations, our hope is to arrive at a better understanding of this disturbing phenomenon, with the goal of finding a lasting solution to this hidden occupational hazard. Most of us might have thought we left bullies behind in the playground. But as many as one in ten people are on the receiving end of bullying at work, according to research in 2000. Each year, 18 million working days are lost because of workplace bullying, the report *Workplace Bullying in Britain* reveals.

Researchers at the University of Manchester Institute of Science and Technology (UMIST) contacted 5,300 people in various jobs across the private, voluntary and public sectors for their research. Almost half had witnessed some kind of bullying at work and one in six had been the victim of bullying in the previous six months. One in four had been bullied in the last five years.

'If one in six is suffering bullying it adversely affects sickness levels,' says Cary Cooper, Bupa professor of organisational psychology and health, who led the research. And it is not only individual victims who are affected but others around them too, he adds. **'When somebody witnesses bullying, it affects the whole workforce.'**

Who are the bullies at work?

So what sort of people turn into bullies? 'The psychology varies,' says Prof Cooper. 'You go from the psychopath who had a problem early in childhood who, when they get to a position of power, feel that if they make other people feel incompetent it must mean they are very competent themselves. These tend to be very insecure people. 'But the majority of bullies are not psychopathic. **The bulk of them are just under such stress they use bullying as a management tool. They don't know how to cope with their workload.** If they are under stress they just say something like, "Just get that done and don't bring your problems to me."'

What is bullying?

Most of us think of bullying as being rude and shouting at people, but it can come in many forms.

Val Wallace, general manager of the Andrea Adams Trust, which was set up to tackle workplace bullying, had first hand experience of obvious bullying before she worked for the trust.

Companies can reduce the risk of workplace violence by training staff to recognize warning signs and having procedures for prevention and response.

'I worked in a concessionary shop within a store, employed as area manager. I was doing extremely well. I had good staff retention. I had been with the company since the word go.

'Then somebody new came in – another woman who obviously saw me as a threat. I had no intention of going any further in the company as I was quite happy with what I was doing.

'She withheld information so I could not get on with my job. She would turn up and openly

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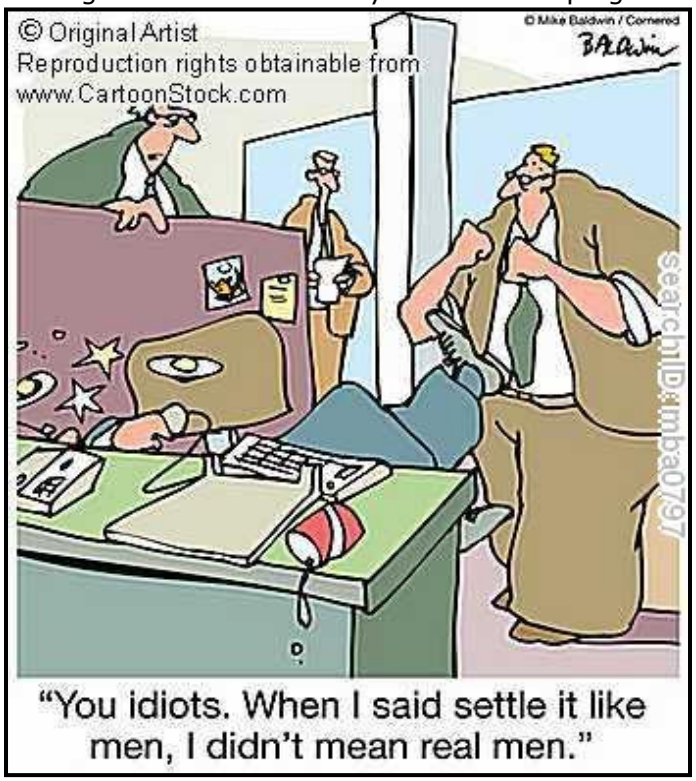
humiliate me in front of staff, calling me a non-thinker and asking why I called myself an area manager when I was only fit for sweeping the



floors.

'Eventually I left. From that day on I promised I would never work in a situation like that again.' Sometimes bullying can be much more subtle – so much so that the person being bullied may not be sure whether it really is bullying or not. Bullying can include, for example, deliberately ignoring someone or excluding them.

Bullying Warning Signs.

The Andrea Adams Trust **defines bullying** as:

- **unwarranted, humiliating, offensive behaviour towards an individual or groups of employees**
- **persistently negative malicious attacks on personal or professional performance which are typically unpredictable, unfair, irrational and often unseen**
- **an abuse of power or position that can cause such anxiety that people gradually lose all belief in themselves, suffering physical ill health and mental distress as a direct result**
- **the use of position or power to coerce others by fear or persecution, or to oppress them by force or threat.**

The Trust accepts there is a fine line between strong management and bullying. But when the target of bullying is persistently downgraded and becomes distressed, that line is crossed. The physical effects can be much the same as with any other form of stress: feeling sick, loss of appetite, numbness, panic attacks, even depression.

Common Characteristics of Violent Workers.

The following characteristics are the most common in those who commit workplace violence:

1. **History of violent behavior. This includes any involvement with the criminal justice system.**
2. **Middle-aged male worker.**
3. **Upset with only having low-level tasks to do.**
4. **Bitter and unhappy.**
5. **No job security.**
6. **Problems growing up, including bad grades in school, abusive parents, etc.**
7. **Substance abuse, including taking heavy medication, drugs and liquors.**

Warning Signs to Look for in Employees.

Violent incidents in the workplace ordinarily follow some sort of "trigger" that pushes an already vulnerable person to take drastic action. Be wary of employees who start to behave in the ways listed below:

1. **They say they've been treated unfairly.**
2. **They say they're being forced to wait for something (a promotion, raise, etc.)**
3. **They show signs of mental instability.**
4. **They begin to isolate themselves, are thought of as a loner.**
5. **They have recently been disciplined for something.**

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Ergonomic Assessments Are Valuable Tools.

Towards safer workplaces and healthier workforces

What are Ergonomics Assessments?

Implementing ergonomics in your business is a scientifically proven way to improve the design of your workplace to maximize worker productivity. Ergonomics focuses on ensuring that your workplace is safe, comfortable, easy to use, and enhances performance. Completing an ergonomics assessment can help you identify any issues or problems that may currently affect your worker's health and productivity or that could cause potential hazardous in the future.

Who does the assessments work and why?

Ergonomic assessments are commonly carried out by ergonomic professionals with the assistance of on-site business owners or managers, who use them to address workplace issues and make suggestions to improve and promote safe and healthy work environment. The assessments can be used to evaluate individual workstations or the entire workplace, as it relates to or affects the entire workforce.

Common reasons for ergonomic assessments:

- **Special physical needs for employees (handicapped, postpartum, or injured workers).**
- **Re-design of existing workspace.**
- **Testing of new office equipment and work station furniture.**
- **Physical complaints by employees or worker's compensation compliance.**

The tools used to conduct an ergonomic assessment may vary, but normally begin with a meeting with management and workers to discuss daily job duties and responsibilities and the work environment. This process can include questionnaires, videotaping, and checklists. After all information is completed and turned in for evaluation by the ergonomist, a final report will be compiled. All aspects discussed during the introductory meeting process will be addressed in this report, compiled and presented to management. Any changes or modifications that need to be made will be discussed and implementation would then occur. In order for lasting and measurable ergonomic changes to be incorporated, the implementation process should include employees as well as management and training is also widely suggested.

A typical ergonomic workstation assessment checklist will evaluate and suggest recommendations for:

- **Office or workstation equipment designs.**
- **Monitors, keyboards, mouse, photocopiers' position.**
- **Risk factors associated with ergonomics (body postures, work repetition, heavy loads).**
- **Sources and causes of occupational stress.**
- **Office or workstation lay-out.**

What is the outcome of ergonomics assessments?

Ergonomic assessments provide vital information that can help to avoid potentially hazardous situations and help to implement preventative measures that can lower the risk of accidents. An ergonomic risk assessment can also be encompassed in a traditional assessment, which will further highlight any areas of special concern. **Assessments also help to provide a sound point of reference for management to evaluate the efficiency of work methods and procedures that were in place before the assessment occurred and after the ergonomic suggestions were implemented.** Ergonomic assessments are valuable workplace tools that can help you keep your workers safe and productive.

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OSHE News Updates!

Ergonomics Assessments Projects by Assoc. Professor Abdul Shukor in June-July 2009.

ON Semiconductor, Senawang, Negri Sembilan.

Late June/Early July 2009.

The Ergonomics Assessment project was performed at the company's plants upon the request by the management. Among the activities include observing the existing work routines by the employees, technical evaluations on the body postures using REBA tool and ergonomics task analysis worksheet.

The company's intention to invite the OSHE Bulletin's author to perform this assessment is applauded. All

the workers did cooperate throughout the session. In fact, they welcomed such an initiative by the management as these activities have enabled them to share and express existing hazards and inconveniences and suggested many solutions regarding the workstation designs and workplace lay-outs.

The ergonomics hazards founds and the possible corrective actions were recorded and a report was prepared for the management. Findings and outcomes from the ergonomics assessment was also discussed during a presentation by the author to the company's management. ❁❁❁❁❁

Media Prima Group, Bandar Utama, Selangor.

June/July 2009.

As part of a series of high impact training session, staff of the various subsidiaries of Media Prima Group were given the opportunity to perform ergonomics assessment work with the OSHE Bulletin's author. As the top electronic media and entertainment organisation, workers were exposed to various demanding jobs including handling the big size cameras and the accessories, constant news and information

editing processes as well as psychological-based activities. Obviously, work-related stresses and workplace lay-outs are two main issues need to be tackled during the assessments activities.

Various solutions were identified and work is currently in progress to improve the situation which is based on the ergonomics and work designs guidelines. ❁❁❁❁❁

Cargill Palm Products Sdn. Bhd., Port Kelang, Selangor.

Early July 2009.

Another Ergonomics Assessment project was conducted by the author at this well-known palm oil processing manufacturer. Workers from various sections and departments were taking part in the data gathering activities. As food manufacturing company, aspects such as cleanliness and proper packaging are seriously monitored.

Most activities are done while the workers were standing. Issues including pain in the legs and upper extremities are addressed. Various corrective actions were discussed and work is on the way to implementing these solutions for the benefits of the workers and the company alike. The initiative by Cargill Palm Product's management to conducting this assessment is highly admired. ❁❁❁❁❁

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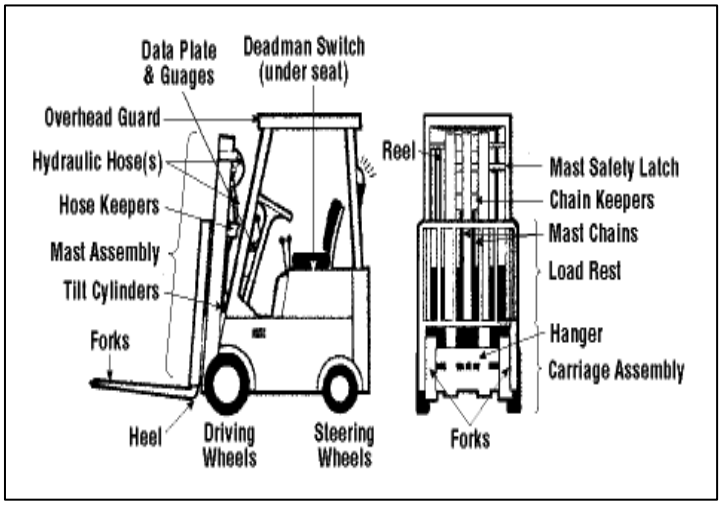
FORKLIFTS – POTENTIAL SAFETY HAZARDS AND SOLUTIONS.

An important knowledge and tips for achieving 'safety culture'

Just 1% of factory accidents involve forklift trucks, but the forklift accidents produce 10% of the physical injuries. Forklift accidents are usually blamed on operator errors. In a study, after each accident, a training session was planned for the drivers. However, as many as 25% of these accidents are caused not by the driver but by controllable environmental factors. We can eliminate hazards and design a safe operating environment only when we understand the real cause of forklift incidents.



As for an example, there was a history of forklift accidents in the canning plant - each reportedly caused by operator errors. The investigation showed other contributing causes:

- **The warehouse was dark. Light readings measured 5 candlepower - far under the acceptable level for general operations.**
- **The plant was noisy. The sound level measured 100 decibels. OSHA Inspectors cited the company for noise violations twice. 60% of the employees suffered hearing loss.**
- **No pedestrian routes or protective islands existed.**
- **Vehicles traveled through the factory too fast. A radar gun measured the average speed through the area where the accident occurred. The average truck passed the accident location at 8 mph.**
- **Production line speed pushed forklift speed to higher values.**
- **The forklift did not have an automatic back alarm.**

Measurements were made to establish the operator's point of first possible reaction and the stopping distance of the vehicle. Computations showed that the operator could not have responded in time to prevent the accident. An automatic backup alarm was essential.

Speed Limits

Regulating the speed limit of an industrial truck is an important part of the environmental design of the workplace. A forklift truck moving through a warehouse had tremendous momentum. Momentum is the mass of an object multiplied by its velocity. Mathematically, momentum is Weight x Speed x 1.5.

A 5,000-pound forklift moving through a warehouse at 10 mph with a 4,000-pound load has a potential destructive force of 135,000-foot pounds of energy. A loaded forklift travels through a warehouse with the force of a Cadillac Eldorado driving 20 mph.

A lift truck cannot stop in an instant. Studies showed that it takes about 1.3 feet for each mile per hour for a panic stop. It takes 0.75 second for

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the operator to become aware of the existence of a hazard and another full second for the mechanical parts of the vehicle to respond.

A forklift truck moving at 10 mph may take 40 feet to stop. Theoretically, the operator should allow 40 feet between the truck and a person on foot. Since this is not practical, we reduce forklift speeds and establish operating rules.

Lovested says that the maximum speed limit allowable by a forklift truck is eight miles per hour. In areas where pedestrians are present, speed limits should not exceed three miles per hour. Radar measurements of forklift speeds in factories show Lovested's suggested speeds are appropriate. All speed limits and other traffic advisories should be posted.

The Lighting

As we reach age forty, our eyes go through predictable changes. The lens becomes progressively opaque and the muscles which control the focus of the lens weaken. The condition continues to degenerate until about age sixty when our eyes reach a more or less permanent state of vision. The change is gradual. We seldom recognize the loss of sensitivity.

It requires six times as much light for a man sixty years old to discriminate objects in *dim light* as it takes for a twenty-year-old man. The effect on the worker is predictable. As we lose our ability to discriminate objects in dim settings, we become more sensitive to glare. **A forklift driver may have too little depth perception in a dark warehouse.** He may not see a fellow employee in time to respond.

Forklift trucks normally carry their load in reverse, making auxiliary lighting a complex task. Two lumens per square foot equals 2 foot-candles. The light in a warehouse measuring 2 candlepower is seriously substandard. All safety codes recommend a minimum light level of 20 foot-candles in warehouses. This level of illumination should be adequate for older workers.

Warning Devices

All forklift trucks must have a horn. The driver must monitor the direction of travel and use the horn to warn pedestrians who may be in his blind spots. **A blind spot is by definition any place in the direction of travel which the driver cannot see without special effort. The property use of the horn is an important part of the facility design.** Some employers require the driver to honk as he begins to move; others isolate pedestrian hazard points at which to use the horn.

It is important to discover all environmental blind spots in the driver's path and evaluate the risk of each. A walk-through of the area reconstructing the field of view of the driver is necessary.

You can then follow these simple steps.
1. When approaching an aisle, determine at what point the driver can first see an approaching pedestrian.
2. Next, determine the point at which he is *likely* to see the pedestrian.
3. Compute the desired speed in the area in feet per second. Multiply the measured speed by 1.5 (You may use 3 mph as a standard speed limit.)
4. Multiply the speed, measured in feet per second, by 1.75. This will provide a measure of the mechanical delay of the driver and the vehicle.
5. Add 1.3 feet for each mile per hour of your established speed limit.

If the speed, plus the mechanical reaction delay, plus braking distance is less than the point of the first likely perception, you do not have a blind spot. If the computed stopping distance is longer than the point of first likely perception, a workplace design modification is necessary. You may lower the speed limit, or require the driver to honk as he approaches the intersection.

Employers should not rely exclusively on the horn as a warning device. The nature of a forklift requires the driver to divide his attention. He carries his load while driving in reverse. He must simultaneously monitor the balance of his load at the back of the truck and watch the direction of travel. He drives with his left hand on the steering wheel and his right hand on the load control. He must monitor his blind spots. When he uses the horn, he automatically gives up some control.

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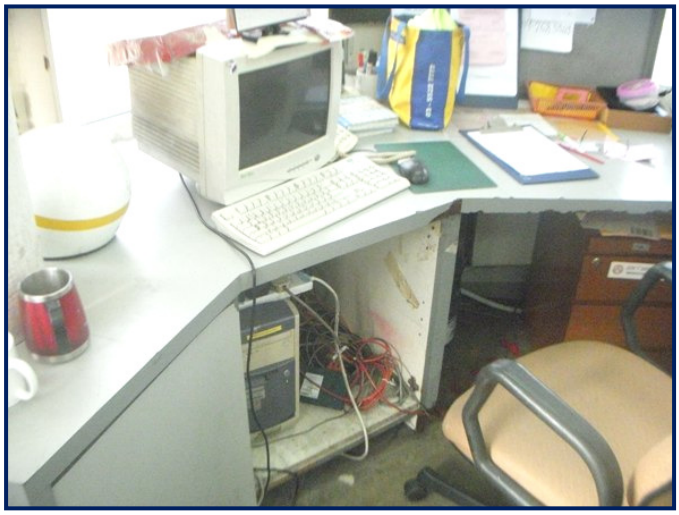
Common Health and Safety Hazards in the Office Environment.

In any office, the workforce is subjected to many different kinds of hazards and threats of different natures. The particular kinds of hazards that you may face depend upon the kind of work done in the office. However, there are some general hazards that may prevail in offices if enough preventive measures are not taken.



Some of the areas of the work environment that require special attention include chemical hazards, workstation design, equipment, task design, and chemical or environmental hazards, if applicable. Other than these, **there are also hazards associated with the physical environment which may include the space in general, ventilation, temperature, light, and other such factors.** Apart from that, there are also psychological factors associated with personal interactions, job control, performance, and the work place.

The electrical equipment that is operational in the working environment also poses some threat and hazard to the people handling the equipment. **There are chances of electric shock and burn injuries, electrical shorts and fire, or even electrocution.** In order to prevent electrical accidents from occurring, it is essential for the equipment to be inspected on regular basis, and moreover, any equipment that is defective in any way should be reported and replaced immediately.

The comfort level of the employees at workplace during working hours should be given special consideration when designing workstations. Failure in doing so can result in the employees going through musculoskeletal disorders. **The most frequent case of this can be a chronic soft tissue injury, which is called the Musculoskeletal Disorders (MSD).**

Another potential safety hazard that may occur in workstations is the height at which storage spaces and shelves are located. This can cause people to fall or even trip and break a bone. In order to prevent this from happening, the most recommended option is to place these spaces at safe heights.

A health hazard may occur in workplace in the form of indoor air pollutants. These can be the cause of respiratory ailments. In order to avoid this, the air conditioning system should be cleaned properly, and the appliances and machines that give out exhausts should be placed in locations where there is enough ventilation.

The noise in the workplace can also pose some problems resulting in stress and tension, thereby being a threat to the psychological health of a person. The first step to prevent this can be by having quiet equipment in the workplace and maintaining good decorum and silence.

A well designed and hazard free office is one which offers complete comfort to the employees during work, without them having to over reach or use awkward posture or having the need to stand or sit for long times.

http://ezinearticles.com/?Common-Health-and-Safety-Hazards-in-the-Office-Environment&id=2398947

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NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH (MALAYSIA)
MINISTRY OF HUMAN RESOURCES, MALAYSIA

"Managing Violence At The Workplace"

A special presentation at 'GLOBAL STRATEGY ON OSH' Seminar by:

ASSOC. PROFESSOR ABDUL SHUKOR ABDULLAH
(Author of OSHE BULLETIN)

Date & Venue:

29 JULY 2009 (Wednesday)

Merdeka Palace Hotel & Suites, Kuching, Sarawak, East Malaysia (Borneo)

For more information and booking, please contact:
Miss Siti Zomariah/Mr. Ahmad Zaki: Tel: +6086 311500 Fax: +6086 515501
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The following high impact OSHE training modules are available for your workforce. Please contact Prof. Abdul Shukor: prof.shukor@gmail.com.

1. Practical Work Stress Management.
2. Ergonomics and Manual Handling.
3. Office Ergonomics and Stress Management.
4. Job Safety Analysis and Ergonomics Interventions.
5. Occupational Safety & Health Act 1994 and Ergonomics.
6. Occupational Safety and Health Awareness Program For Managers.
7. Work-related Musculoskeletal Disorders (WMSD) and Prevention Program.
8. Occupational Stress and Workplace Violence Prevention Program.
9. Work Hazards Assessment.
10. How to implement Ergonomics at Workplace?

Associate Professor Abdul Shukor bin Abdullah – ***Author of the OSHE Bulletin*** **- 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. Among his list of clients' companies are Media Prima, Cargill, ON Semiconductor, Honda, CTRM Aero Composite, NAZA, Perodua, BATC-UTM, UIAM, OUM, Ministry of Finance, MINDEF, RMAF, Petronas, BHPetrol, ExxonMobil, PDRM, TM, Klang Port Authority, FEC (M), NIOSH and DOSH of Malaysia. Abdul Shukor is also the Dean of Japanese Associate Degree (JAD) Program at UNISEL, Shah Alam, Selangor.**