
UNIT-16 EMPLOYEE HEALTH AND SAFETY

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16.0 LEARNING OUTCOME

After reading this unit, you should be able to:

- Know the importance of employee health and safety;
- Define Health and Safety;
- Analyse the remedial measures for occupational diseases; and
- Bring out the remedial measures for Industrial Accidents.

16.1 INTRODUCTION

Today employees expect their employers to provide work environments that are safe and healthy. However, many employers once viewed accidents and occupational diseases as unfavorable byproducts of work. This idea may still be prevalent in many industrial settings in underdeveloped countries like India, the idea must be replaced with the concept of using prevention and control to minimise or eliminate risks in

workplace. Employers in variety of industries have found that placing emphasis on health and safety pays off in a number of ways.

Good companies maintain safe working environments by making health and safety a top priority throughout the organisation. Health and safety are important aspects of an organisation's smooth and effective function. Good health and safety performance ensures an accident - free industrial environment.

Companies seek to create common health and safety philosophies, strategies and processes. To ensure health and safety consistency and promote an overall health and safety culture, leading benchmark companies coordinate key strategies and activities through a centralised oversight department, such as corporate health and safety.

Awareness of Occupational Health and Safety (OH & S) has improved in India considerably. Organisations have started attaching the same importance to achieve high (OH & S) performance as they do to other key aspects of their business activities. This demands adoption of a structured approach for the identification of hazards, their evaluation and control of risks.

Government of India believes that without safe and healthy working conditions, social justice cannot be achieved and the attainment of safety and health at work is fundamental to economic growth.

Under the constitution of India the Directive Principles of the State policy provides,

1. For securing the health and strength of workers, men and women and providing
2. Just and humane conditions of work and maternity relief (Article 42)

On the basis of these Directive Principles, the Government of India declares its policy, priorities and strategies, purposes through the exercise of its power. The formulation of policy, priorities and strategies in occupational safety, health and environment at work places is not undertaken by national authorities alone but in some form of consultation with the social partners i.e. employees organisations, autonomous & voluntary organisations public etc for agreement and involvement for ensuring set goals and objectives.

The changing job patterns and working relationships, the rise in self employment greater sub-contracting, out sourcing of work and the increasing number of employees working away from their establishment and home work pose the problem of management of occupational safety and health risks. New safety hazards and health risks will be appearing along with the transfer and adoption of new technologies. In addition, many of the well known conventional hazards will continue to be present at the workplace many years ahead till the risks arising from exposure to these hazards are brought under adequate control.

16.2 HEALTH

Health refers to general state of physical, mental and emotional well-being. A healthy person is free of illness and injury. Health management practices in organisations strive to maintain the overall well-being of individuals.

Employees' health problems are varied and inevitable. They can range from minor illnesses such as colds to serious illnesses related to the jobs performed. Some employees have emotional health problems; others have alcohol or drug problems. Some problems are chronic; others are transitory, but all may affect organisational operations and individual employee productivity.

The well-being of the employee in an industrial establishment is affected by accidents and by ill-health; physical as well as mental. Ill health of employees results in reduced productivity, higher unsafe acts, and increased absenteeism. A healthy worker, on the other hand, produces results opposite to these. In other words, healthy employees are more productive, more safety conscious, and are more regular to work. The worker who is healthy is always cheerful, confident looking, and is an invaluable asset to the organisation.

A realisation of the advantage, which flow from a healthy workforce, has impelled much management to provide health services to their employees, which vary from the simple provision of first-aid equipment to complete medical care. Many progressive organisations maintain well-equipped dispensaries with full-time or part-time doctors and full-time compounder/nurses. Unlike his/her counterpart of yester-years, who would take every precaution to protect his horses against diseases but felt that the health of the human worker was his own business. The manager of today is fully aware of the advantages of having a healthy workforce.

The protection of the health of the workers is a legal requirement too. Sections 11 to 20 of the Factories Act, 1948 deal with the health of workers.

Provisions of the Act:

- Factory to be kept clean and free from effluvia and dirt (S.11).
- Arrangements to be made for disposal of wastes and effluents (S.12).
- Adequate ventilation and temperature to be provided (S.13).
- Measures to be taken for prevention of inhalation or accumulation of dust and fumes (S.14).
- Standards for artificial humidification to be fixed (S.15).
- Overcrowding related injuries to health of workers to be avoided. 9.9/14.2 cubic metres of space must be provided for each worker (S.16).
- Sufficient and suitable lighting must be provided in every part of the factory (S.17).
- Glazed windows to be kept clean. Measures need to be taken for prevention of glare and formation of shadows (S.17).
- Suitable points for wholesome drinking water must be provided. Drinking points to be legibly marked and located away from urinals. Water needs to be cooled if the number of workers is 250 or more (S.18).
- Latrines and urinals to be separately provided for male and female workers. They should be well lighted and ventilated (S.19).
- Sufficient number of spittoons must be provided. Whoever spits outside the spittoons shall be punishable (S.20).

16.2.1 Job Stress and Burnout

Problems such as alcoholism and drug abuse sometimes result from stress, especially job stress. Here job-related factors such as overwork, relocation, and processing with customers eventually put the person under such stress that a pathological reaction such as drug abuse occurs.

A variety of external environmental factors can lead to job stress. These include work schedule, pace of work, job security, route to and from work, and the number and nature of customers or clients. Even noise including people talking and telephones ringing, contribute to stress.

However, no two people react to the job in the same way, because personal factors also influence stress. For example type a personalities – people who are workaholics and who feel driven to always be on time and met deadlines – normally place themselves under greater stress than do others. Job stress has serious consequences for both employer and employee. The human consequences include anxiety, depression, anger and various physical consequences, such as cardiovascular disease, headaches, and accidents. For the organisation, consequences include reductions in the quantity and quality of job performance, increased absenteeism and increased grievances and health care costs.

Reducing Job Stress:

There are number of ways to alleviate stress. In his book “Stress and the Manager” Karl Albrecht suggests the following ways to reduce job stress:

1. Build rewarding, pleasant, cooperative relationships with colleagues and employees
2. Don't bite off more than you can chew
3. Build an especially effective and supportive relationship with your boss
4. Negotiate with your boss for realistic deadlines on important projects.
5. Learn as much as you can about upcoming events and get as much lead time as you can to prepare for them.
6. Find time everyday for detachment and relaxation.
7. Take a walk around the office to keep your body refreshed and alert.
8. Find ways to reduce unnecessary noise.
9. Reduce the amount of trivia in your job; delegate routine work whenever possible.
10. Limit interruptions.
11. Don't put off dealing with distasteful problems.
12. Make a constructive “worry list” that includes solutions for each problem.

The employer and its human resource specialist and supervisors can also play a role in identifying and reducing job stress. Supportive supervisors and fair treatment are two obvious steps. Other steps include:

- i. Reduce personal conflicts on the job.
- ii. Have open communication between management and employees.
- iii. Support employees' efforts for instance, by regularly asking how they are doing.
- iv. Ensure effective job-person fit, since a mistake can trigger stress.
- v. Give employees more control over their jobs.
- vi. Provide employee assistance programmes including professional counseling.

- vii. Reassess your goals in terms of their intrinsic worth. Are the goals you have set for your self attainable? Are they really worth the sacrifices you'll have make?
- viii. Think about your work. Could you do as good as a job without being so intense or by also pursing outside interests?

16.2.2 Computer Related Health Problems

The fact that many workers today must spend hours each day working with computers is creating health problems at work. Short – term eye problem like burning, itching, and tearing as well as eyestrain and eye soreness are common complaints among video display users.

Backaches, and neck aches are widespread among display users. These often occur because employees try to compensate for awkward body positions. Researchers also found that employees who used video displays and had heavy workloads were prone to psychological distress like anxiety, irritability and fatigue.

The following measures have been further recommended:

1. Give employees rest breaks. The institute recommends a 15 minute rest break after two hours of continuous work for operators under moderate work loads and 15 minute breaks every hour for those with heavy work loads.
2. Design maximum flexibility into the work station so it can be adapted to the individual operator. For example, use adjustable chairs with mid back supports and a video display in which screen height and position are independently adjustable.
3. Reduce glare with devise such as shades over windows, terminal screen hoods properly positioned, and recessed or indirect lighting.
4. Give workers a complete pre-placement vision exam to ensure properly corrected vision for reduced visual strain.
5. Place the keyboard in front of the employee, titled away with the rear portion lower than the front.
6. Place the computer mouse and mouse pad as close to the user as possible and ensure there are no obstructions on the desk that impede mouse movement.
7. Allow the user to position his or her wrists at the same level as the elbow.
8. Put the monitor at or just below eye level at a distance of 18 to 30 inches from the eyes.
9. Let the wrist rest lightly on the pad for support.
10. Put the feet flat on the floor, or on the footrest.

Workplace Smoking

Smoking is a serious problem for both employees and employers. Studies even shown that for some reason, smokers have a significantly greater risk of occupational accidents than do non smokers, as well as much higher absenteeism rates. In general, “sometimes employee are less healthy than non-smokers, are absent more, make more

and more expensive claims for health and disability benefits and endangers co-workers who breathe smoking air.

16.2.3 Noise Control

An age-old problem, and not effectively tackled till now, is the noise in industrial establishments. Noise made its appearance in organisations when human started working on metal. As civilisation advanced, human discovered more and more ways of having machines to do his/her work, and each new machine added to the problem. For quite a number of years, noise was endured by all. But, in the recent past, the increasing use of machines of great speed is telling upon the health of the workers.

Long exposure to excessive noise impairs the hearing of employees. The level and duration of noise and the exposure that is likely to cause deafness varies from person to person. It is agreed that long exposure to noise in excess of the prescribed limits makes one deaf.

Hearing loss is not only effect of noise. Constant exposure to high noise levels can cause hormonal imbalances, changes in blood circulation, dizziness, increase in respiratory rate, heartburn, sleep disturbances and fatigue.

Noise Control Methods

It is impossible to eliminate noise from industrial establishments, as long as machinery is used in manufacturing operations. However, noise control can help minimise harmful effects on employees. Noise control can be achieved (i) at the source (ii) through enclosure, (iii) by absorption, or (iv) by ear protection.

Controlling noise at its *origin* is the best method of reducing its harmful effects. Noise can be controlled at its source by questioning the noise-producing elements by repairing or redesigning the machines: mounting machines to reduce vibration; or substituting noise – producing elements with quieter ones.

Considerable reduction in the level of noise may be achieved by providing enclosures for machines with specially made covers or housing them in separate rooms. But a small opening is enough to produce heavy leakage of noise. Care should, therefore be taken to make the enclosure as full proof as possible. Where machines cannot be enclosed, places which need quieter surroundings may themselves be enclosed, for example a works office. Similarly, a machine transmitting vibration on a large scale may be isolated from the rest of the operations.

The harmful effects of noise may be reduced by absorbing it. Ceilings and walls may be constructed with acoustic materials to absorb sound. Empty space around the high noise-producing machine may be provided to absorb the noise. High ceilings dissipate noise considerably.

Where noise is excessive and other methods of noise control are likely to be ineffective, employees working close to the source of noise may be given ear protection to prevent any impairment of their hearing capacity. They may be provided with muffs, helmets, cotton and soft rubber, to be worn by them while on work. They should be educated to wear the protection equipment, because the tendency with most workers is to ignore.

16.2.4 Acquired Immune Deficiency Syndrome (AIDS)

AIDS is likely to cause considerable confusion and disruption in the workforce. When employees realise that they are working with an infected worker, they demand that the hapless employee should be dismissed. If the management discharges the employee, the law is violated, particularly in the US where individuals who have AIDS are protected by federal, state and local laws. This protection generally comes

in the form of protection against discrimination and is based on the fact the virus cannot be spread by casual contact.

Organisations are hard hit by additional costs – direct and indirect – when their employees contract the disease. Direct costs are in the form of increased medical burden. Indirect costs result from loss of productivity when employees refuse to work with an AIDS-infected worker. It is responsibility of the government, and business and non-governmental organisations to create better awareness about the disease in the minds of the people.

Credit should go to central government undertakings, particularly HMT and BHEL, for initiating measure to prevent AIDS. Teams of doctors from in-house Occupational Health Services visit plants and give lectures to employees on AIDS prevention. Lecturers are held once or twice every year.

What is needed most for the employers is to educate workers about AIDS. The following guidelines need to be followed to make the educational programme effective:

1. Employees must be made to understand how AIDS is contacted. Understanding about the ways to contacting AIDS will ensure that the activities do not occur at the workplace.
2. Presentations to employees must be handled by professionals, preferably from experts. This is necessary as the message presented is going to include sexual references which, if not handled properly, are likely to have a negative impact on employees.
3. All employees must attend the sessions.

16.2.5 Alcoholism and Drug Abuse

Alcoholism is a serious and widespread disease. It does not strike any particular group – alcoholism can strike employees from the junior to the general manager.

The effects of alcoholism on the worker and on the work are serious. Both the quality and quantity of work decline sharply. A form of “on-the-job absenteeism” occurs as efficiency declines. An alcoholic worker is more unlikely to observe safety precautions while on the job or off the job. Morale of the other workers is likely to suffer as they are required to do the work of their alcoholic peer.

Organisations employ three techniques to tackle alcoholism in workplaces. First is disciplining alcoholics. Where disciplining fails, the alcoholic is discharged. Second is in-house counseling by the HR department, the company doctor or by immediate supervisor. Finally, companies use outside agencies, psychiatrists and clinics to deal with the problem of alcoholism.

Drug abuse is a recent phenomenon and is a serious one. Drug abuse is more evident among young employees and is found across all job levels. Employees who are drug addicts are often much more difficult to detect than alcoholics-liquor is easy to smell but not drugs. Drug abuse affects job performance. The problem of a drug addict indicates his or her on-the-job behaviour.

As a result of the increased use of drugs in the workplace, more and more companies have begun to use some form of drug testing for both job applicants and existing employees.

Drug testing is risky. An employer can be exposed to substantial liability for defamation for making a false accusation of drug use. The following guidelines can help avoid the risk:

1. Testing only applicants or employees whose jobs are considered safety specific or critical.
2. Using only valid measures of drug use.
3. Obtaining valid consent of the applicant or employee and then provide the examinee with the results of the tests.
4. Maintaining strict confidentiality of test results.

Organisations can use the same techniques (recommended to cure alcoholism) to be problem of drug abuse.

16.2.6 Violence in the Work Place

Violence in the work place, once an exception to daily work life, has become common these days. Those who are at high risk are taxi drivers, police officers, retail workers, cashiers at petrol bunks, and people who work alone or at night. Violent incidents include fist fights, shooting, stabbing and sexual assault.

Violence disrupts productivity; causes untold damage to those exposed, and costs employers millions of rupees. Obviously, organisations should initiate measures to protect employees and physical resources. It is important that companies concentrate on avoiding violence rather than simply dealing with it after it occurs.

The following will help companies avoid falling victims of violence:

1. Hiring with caution. Pre-hire drug testing, detailed questions about previous employment, and criminal record checks can go a long way towards violence-prone individuals.
2. Develop a plan for preventing violence and for dealing with it when it occurs. Reporting requirements for both violence and threats of violence should be an integral part of the plan. The plan should also be drawn by employee participation and professionals who are experts in areas of violence assessment, counseling and law enforcement.
3. Establish a crisis-management team with the authority to decide and act quickly. This group will evaluate problems, select intervention techniques, and co-ordinate follow-up activities.
4. Train supervisors and managers in how to recognise aggressive behaviour, identity the warning signs of violence, and resolve conflicts. Orient all employees towards assuring a violence free work environment.

16.2.7 Health Promotion

Employers concerned about maintaining a healthy workforce must move beyond simply providing healthy working conditions and begin promoting employee health and wellness in other ways. Health promotion is a supportive approach to facilitate and encourage employees to enhance healthy actions and life styles. Health promotion efforts can range from providing information and enhancing employee awareness of health issues to creating an organisational culture supportive of employee health enhancements. Going beyond just compliance with workplace safety and health regulations. Organisations engage in health promotion by encouraging employees to make physiological, mental, and social choice that improve their health.

Health Promotion Levels

Level 1	Level 2	Level 3
<p><u>Information & Awareness</u></p> <ul style="list-style-type: none"> • Brochures & materials • Health risk screenings • Health tests and measurements • Special events and classes. 	<p><u>Lifestyle Wellness</u></p> <ul style="list-style-type: none"> • Wellness education programme • Regular health classes. • Employee assistance programmes. • Support groups • Health incentives. 	<p><u>Organisational Health</u></p> <ul style="list-style-type: none"> • Benefits integrated with programmes. • Dedicated resources and facilities. • Continuous health promotion. • Health education curriculum.

The first level is useful and may have some impact on individuals, but much is left to individual initiatives to follow behaviors. Employers provide information on such topics as weight control; stress management indicator that many employers have limited their efforts to the first level is that 93% of promotion program and 72% of them offer health education and training programs. However, only 27% of the firms conducted health risk screenings and appraisals. Even through such efforts may be beneficial for some employees. Employers who wish to impact employees' health must offer second level efforts through more comprehensive programmes and efforts that focus on the life style "wellness" of employees.

Wellness Programmes

Employers desire to improve productivity, decrease absenteeism. Wellness programmes are designed to maintain or improve employee lifestyle changes. Early wellness programmes were aimed primarily at reducing the cost and risk of disease. Newer programmes emphasise healthy lifestyles and environment, including reducing cholesterol and heart disease risks and individualised exercise programmes and follow-up. Employer sponsored support groups have been established for individuals dealing with health issues such as weight loss, nutrition, or smoking cessations.

Employee Assistance Programmes (EAP)

Organisations use as a broad based response to health issues. It provides counseling and other help to employees having emotional, physical or other personal problems. In such a programme employer contracts with a counseling agency contact the agency, either voluntarily or by employer referral, for assistance with a broad range of problems.

EAPs help employees with variety of problems. One survey of EAP counselors found that the most common employee issues dealt with were: (1) Depression and anxiety (2) Marital and relationship problems (3) Legal Difficulties and (4) Family and children concerns other areas.

Commonly addressed as part of an EAP include substance abuse, financial counseling and career advice. Critical to employee usage of an EAP is preserving confidentiality. For that reason, employers outsource EAPs to trained professionals, who usually report only the number of employees and services provided, rather than details on individuals using an EAP.

Organisational Health and Culture

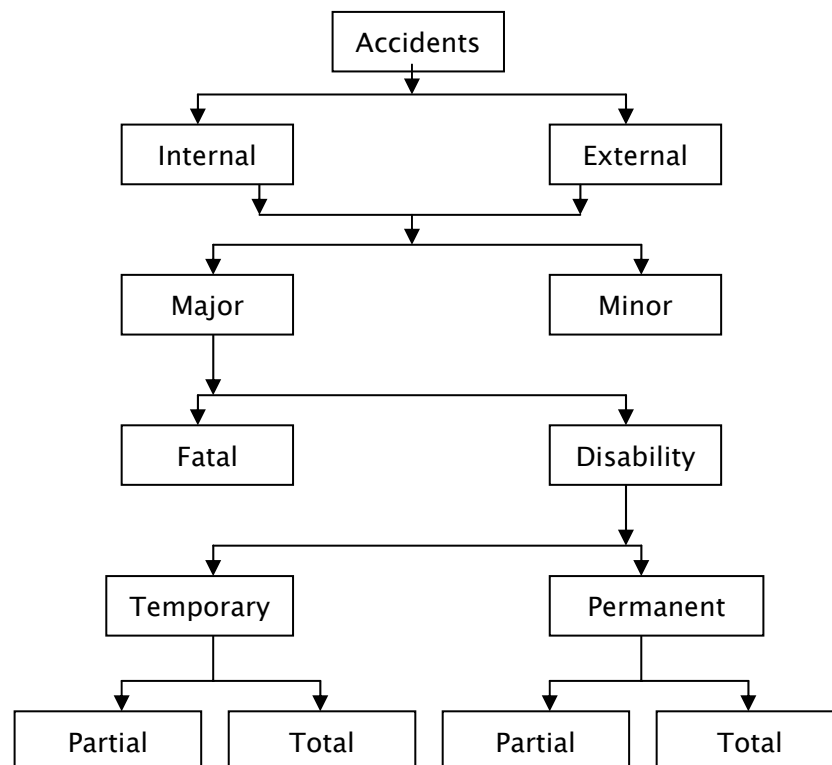
Employers both large and small may recognise that an organisational culture that emphasises and supports health efforts is beneficial. Common to these employers is

an integrative, broad-based effort supported both financially and managerially. Development of policies and procedures supporting health efforts, establishing on-site exercise facilities, and consistently promoting health programmes all contribute to creating a health promotion environment throughout the organisation.

16.3 SAFETY

An accident-free plant enjoys certain benefits. Major ones are substantial savings in cost, increased productivity, and moral and legal grounds. Safety refers to protecting the physical well-being of people. The main purpose of effective safety programmes is to prevent work-related injuries and accidents.

Types of Accidents



Causes of Accidents

There are three basic causes of workplace accidents: (a) chance occurrences, (b) unsafe conditions, and (c) unsafe acts on the part of employees. Change occurrences contribute to accidents but are more or less beyond management's control (such as walking past a plate-glass window just as some one hits a ball through it). We will therefore focus on unsafe conditions and unsafe acts.

Unsafe Conditions and other Work Related Factors

Unsafe conditions are one main cause of accidents. The mechanical and physical conditions that cause accidents. They include such as:

- Improperly guarded equipment.
- Defective equipment
- Hazardous procedures in, on or around machines or equipment.

- Unsafe storage: congestion, overloading.
- Improper illumination: Glare, insufficient light.
- Improper ventilation: Insufficient air change impure air source.

In addition to unsafe conditions three other work related factors contribute to accidents: the job itself, the work schedule, and the psychological climate of the workplace.

Certain jobs are inherently more dangerous. For example, the job of crane operator results in about three times more accident related hospital visits than does the job of supervisors. Similarly some departments' work is inherently safer. A book keeping department usually has fewer accidents than a shipping department.

Work schedule and fatigue also affect accident rates. Accident rates usually don't increase too noticeably during the first five or six hours of the work day. But after that, the accident rates increases faster than the increase in the number of hours worked. This is due partly to fatigue and partly to the fact that accidents occur more often during night shifts.

Unfortunately some of the most important working conditions – related causes of accidents are not as obvious because they involve workplace psychology. A strong pressure within the organisation to complete the work as quickly as possible, employees who are under a great deal of stress and a poor safety climate. Accidents occur more frequently in plants with a high seasonal layoff rate and where there is hostility among employees many garnished wages and blighted living conditions. Temporary stress factors like high work place temperature, poor illumination and a congested workplace also correlate with accident rates.

How to Prevent Accidents?

In practice, accident prevention boils down to two basic activities:

1. Reducing unsafe conditions.
2. Reducing unsafe acts.

Reducing unsafe conditions is always an employer's first issue of defense. Safety engineers should design jobs to remove or reduce physical hazards. In addition supervisors and managers play a role in reducing unsafe conditions. A checklist or the self – inspection check can help identify and remove potential hazards.

Sometimes the solution for eliminating an unsafe condition is obvious, and sometimes it is more subtle. For example, slips and falls at work are often the result of debris or slippery floor. Relatively obvious remedies for problems like these include slip-reducing floor coatings floor more off spills. But perhaps less obviously, special safety gear can also reduce the problems associated with otherwise unsafe conditions. For example, slip-resistant foot wear with grooved roles can reduce slips and falls. Cut resistant gloves reduce the hazards of working with sharp objects.

Getting employees to wear personal protective equipment can be a famously difficult chore. Including the employees in planning the program, reinforcing appropriate behaviors, and addressing comfort issues can smooth the way for more widespread use of protective equipment. Wearability is important in addition to providing reliable barrier protection and durability protective clothing should fit properly; be easy to care for maintain, and repair; be flexible and light weight; provide comfort and reduce heat stress; have rugged constructed; be relatively easy to put on and take off and be easy to clean dispose of and recycle.

Again, reducing unsafe conditions – by designing the job properly and having managers watch for hazards – should always be the first choice. Then come

administrative controls, such as job rotation to reduce long – term exposure to the hazard. Only then turn to personal protective equipment.

Reducing unsafe acts – through screening training or incentive programs, for example, is the second basic way to reduce accidents. Let's look at how to do this.

16.3.1 Causes of Unsafe Acts

Most safety experts and managers know it is impossible to eliminate accidents just by reducing unsafe conditions. People cause accidents with unsafe acts such as throwing materials using unsafe procedures in loading, placing or mixing by lifting improperly.

While safe acts can undo even the best attempts to minimise unsafe conditions. For years psychologists assumed that some employees were simply more accident prone than others, and the accident prone people generally caused more accidents.

Therefore, while some believe that most accident-prone people are impulsive, most experts today doubt that accident proneness is universal that some people will have more accidents no matter what the situation. Instead, the consensus is that the person who is accident prone on one job may not be so on a different job.

Various human traits do relate to accident proneness in specific situations. For example, accident prone drivers performed worse in a test of motor skills than did drivers with fewer accidents and older adults with impaired vision were at a higher risk for falls and motor vehicle crashes. People who were more fatalistic, negative and cynical were more likely to exhibit violent behaviour in the job.

Reducing Unsafe Acts by Emphasising Safety:

It is the responsibility to set the tone so subordinates want to work safely. It is necessary to show by both word and deed that safety is crucial. For example, supervisors should:

1. Praise employees when they choose safe behaviors.
2. Listen when employees offer suggestions, concerns or complaints.
3. Be a good example, for instance by following every safety rule procedure.
4. Visit plant areas regularly.
5. Maintain open safety communications – for instance, by telling employees as much as possible about safety activities such as testing alarms and changing safety equipment or procedures.
6. Link manager's bonuses to safety improvement.

Reducing Unsafe Acts through Selection and Placement:

Screening is another way to reduce unsafe acts. Here, the aim is to isolate the trait (such as visual skill) that might predict accidents on the job in question, and then screen the conditions for this trait. Tests have distinguished between those who do and do not have more car accidents, falls, and violent out bursts studies suggests that a test like Employee Reliability Inventory (ERI) can help employers reduce unsafe acts at work. The ERI purportedly measures reliability dimensions such as emotional maturity, conscientiousness, safe job performance and courteous job performance. While the findings of one study were not definitive, using the ERI in the selection process did seem to be associated with reductions in work related accidents.

Reducing Unsafe Acts through Training

Safety training is another way to reduce unsafe acts. This is especially appropriate for new employees. They should be instructed safe practices and procedures, warn them of potential hazards, and work on developing safety – conscious attitude.

Reducing Unsafe Acts through Motivation Posters, Incentive Programs and Positive Reinforcement:

Safety posters also help reduce unsafe acts. However, posters are not substitute for comprehensive safety programme; instead employers should combine them with other techniques (like screening and training) to reduce unsafe conditions and acts and also change them often.

Others use positive reinforcement programs to improve safety at work. Researchers introduced one program in a whole sale bakery that takes wraps, and transports pastry products to retail outlets nation wide.

At the conclusion of training phase the employees were motivated to consider increasing their performance to the new safety goal. For the following reasons: for their own protection, to decrease costs of the company and to help the plant get out of last place in the safety ranking of the parent company.

16.3.2 Management Committee and Safety

Telling supervisors to watch for spills and telling employees to work safely is futile if everyone in the firm believes management isn't serious about safety. Safety starts with top management commitment.

Everyone should see convincing evidence of top management commitment. This includes top management being personally involved in safety activities; giving safety matters high priority in meetings and production scheduling; giving the company safety officer high rank and status; and including safety training in new workers training ideally “safety is an integral part of the system, woven into each management competency and a part of everyone's day to day responsibilities” In addition:

- i. Institutionalise management's commitment with a safety policy and publicise it. This should emphasise that the firm will do everything practical to eliminate or reduce accidents and injuries. Emphasise that accidents and injury prevention are not just important but of the utmost importance.
- ii. Analyse the number of accidents and safety incidents and then set specific achievable safety goals.

Safety Committees

Employees frequently participate in safety planning through safety committees, often composed of workers from a variety of levels and departments. A safety committee generally meets at regularly scheduled times has specific responsibilities for conducting safety reviews, and makes recommendations for changes necessary to avoid future accidents. Usually at least one member of the committee comes from the HR departments.

16.3.3 Safety Policies and Discipline

Designing safety policies and rules and disciplining violators are important components of safety efforts. Frequently reinforcing the need for safe behaviour and

supplying feedback on positive safety practices also are effective in improving worker safety. Such efforts must involve employees, supervisors, managers, safety specialists, and HR staff members.

Safety Training and Communications

One way to encourage employee safety is to involve all employees at various times in safety training. Safety training can be done in various ways. Regular sessions with supervisors managers, and employees often are coordinated by HR staff members. Showing videos, television broadcasts, and internet based resources all are means used to conduct safety training.

To reinforce safety training continuous communication to develop safety consciousness is necessary. Merely sending safety memos is not enough. Producing newsletters, changing safety posters, continually updating bulletin boards, and posting safety information in visible areas also are recommended.

Employees Safety Motivation and Incentive

To encourage employees to work safely many organisations have used safety contests work behaviour. Jewelry, clocks, watches, and even vacation trips have been given as rewards for good safety records. Unfortunately some evidence indicates that incentives tend to reinforce under reporting and “Creative” classifying of accidents. This concern about safety incentives, raised by OSHA, is that employees and managers do not report accidents and injuries so that they may collect the incentive rewards.

Inspection, Accident Investigation and Evaluation

It is not necessary to wait for an OSHA inspectors to inspect the work area for safety hazards. Inspections may be done by a safety committee or by a safety coordinator. They should be done on a regular basis, because OSHA may inspect organisations with about – average lost workday rates more frequently.

When accidents occur they should be investigated by the employer’s safety committee or safety coordinator. The phases of accident investigation are four as follows:

1. Review the scene
2. Interview Employees / others
3. Prepare report
4. Identifying Recommendations

Closely related to accident investigation is research to determine ways of preventing accidents. Employing safety engineers or having outside experts evaluate the safety of working conditions is useful. In many similar accidents seem to occur in an organisational unit, a safety education training program may be necessary to emphasise safe working practices. As an example, a publishing company reported a greater – than – average number of back injuries among employees who lifted heavy boxes. Safety training on the proper way to lift heavy objects was initiated to reduce the number of back injuries.

Organisations should monitor and evaluate their safety efforts. Just as organisational accounting records are audited, a firm’s safety efforts should be audited periodically as well. Accidents and injury statistics should be compared with previous accident

patterns to identify any significant changes. This analysis should be designed to measure progress in safety management.

16.4 RESPONSIBILITIES

The general goal of providing a safe and healthy workplace is reached by operating managers and HR staff members working together. The primary health and safety responsibilities in an organisation usually fall on supervisors and managers. An HR manager or safety specialist can help coordinate health safety programmes, investigate accidents, produce safety program materials, and conduct formal safety training. However, department supervisors and managers play key roles in maintaining safe working conditions and a healthy workforce. For example, a supervisor in a warehouse has several health and safety responsibilities: reminding employees to wear safety hats; checking on the cleanliness of the work area; observing employees for any alcohol drug, or emotional problems that may affect their work behaviour; and recommending equipment changes (such as screens, railing, or other safety devices) to engineering specialists in the organisation.

A position becoming more common in many companies is that of safety/environmental officer. This combination may make sense in situations where danger results from chemical (or) other sources of pollution that may be hazardous to both employers and the public or the environment. Because both safety and environmental responsibility require working with the government agencies, putting someone in the job with the skills to deal with governmental agencies and ensure compliance with a wide range of regulatory issues is a good choice.

16.4.1 Awareness

Awareness can be created among the workforce by following methods:

- By providing forums for consultations with employers' representatives workers representatives and community on matters of National concern relating to safety, health and environment at work place with the overall objective in creating awareness and enhancing National productivity.
- By encouraging joint – Labour Management efforts to preserve, protect and promote National assets and to reduce injuries and disease arising out of employment.
- By maximising gains from the substantial investment in awareness campaigns by sharing experience and learning.
- By including occupational safety and health at workplace in schools higher technical medical, professional and vocational courses.
- By securing good Liaison arrangements with the International organisations.
- By providing medical criteria which will assure in so far as practicable that no employee will suffer diminished health, functional capacity, or life expectancy as a result of his work experience and that in the event of such occupational diseases having been contracted, suitably compensated.
- By providing for appropriate reporting procedures with respect to occupational safety and health to help achieve the objectives and to accurately describe the nature of the occupational safety and health problem with a view to carry out

national project study, surveys to identify problem areas and pragmatic strategies.

There are many side affects, if we use even new computers like headaches, sniffles etc., some experts say it is all because of poor ventilation, dust and fumes. It is found recently that new computers emit chemical fumes (which however, diminish after running constantly for a week). And “Safe” office work is actually susceptible to many other health and safety problems including repetitive trauma injuries related to computer use, respiratory illness stemming from indoor air quality and high levels of stress, which are associated with a variety of factors, including task design.

But even facts like these don’t tell the whole story. They don’t reflect the human suffering incurred by the injured workers and their families or the economic costs incurred by employers.

In USA the Congress passed the “**Occupational Safety and Health Act**” in 1970 to assure so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources.

The Act created the “Occupational Safety and Health Administration” (**OSHA**) within the Department of Labour. OSHA’s basic purpose is to administer the Act and to set and enforce the safety and health standards that apply to almost all workers in USA.

An occupational illness is any abnormal condition or disorder caused by exposure to environmental factors associated with employment. This includes acute and chronic illness caused by inhalation, absorption, ingestion or direct contact with toxic substances or harmful agents.

16.5 CONCLUSION

One has to develop special programmers for hazardous occupations and specific sectors; set up training mechanisms; create nation-wide awareness; arrange for the mobilisation of available resources and expertise.

Through dedicated and concerted efforts India will certainly and steadily march towards economic prosperity consistent with the requirements of safety, health and environment at workplace thereby improvising the standard of living of the people.

Particular attention needs to be paid to the hazardous occupations and of workers in precarious conditions such as migrant workers and various vulnerable groups of workers. Work related hazards and occupational diseases in small scale industries and agriculture are likely to increase as the occupational safety and health services are out of reach in these

Thousands of employees die every year in factories due to accidents. An accident-free plant can save on cost, increase productivity, discharge moral commitment towards workers and comply with legal provisions.

Companies have to develop common health and safety philosophies, strategies and processes. To ensure health and safety consistency and promote an overall health and safety culture, leading benchmark companies have to coordinate key strategies and activities through a centralised oversight department, such as corporate health and safety.

16.6 KEY CONCEPTS

Employee Assistance Programmes (EAP): Employee assistance programmes are a welfare measure designed to augment ‘productivity’ of workers in an organisation. The concept of welfare has not been specifically defined or a definition not been agreed upon unanimously. Employee assistance programmes or such other welfare measures are looked at from the utilitarian perspective, more than ethical that the idea is deriving maximum possible output from employees.

Occupational Safety and Health Administration (OSHA): Occupational safety and health administration is an aspect of organisational health. Physical conditions of work need to be regulated. Significantly, the scientific management school of thought is a pertinent paradigm to understanding organisational functioning even in the post modern era of welfare and humanism in that the ‘one best way’ of doing a job may also be the safest and most value adding.

Organisational Health: Discipline, chiefly lack of untoward incidents with respect to legal wrangles or disputes is the prime consideration in organisational health. For maintenance of organisational health, physical and social condition of employment should take workers’ safety into account. To that end, managements need to invest in safety measures. Use of the word ‘invest’ is significant in that the expenditure does not account for ‘cost’ but leads to tangible ‘value’ added to organisational output in the long run, which makes it an ‘investment’.

16.7 REFERENCES AND FURTHER READING

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Desler, Gary, 2003, *Human Resource Management*, 9th Edition, Pearson Education.

Mathis, Robert L. and John.H.Jackson, 2003, *Human Resource Management*, Thomson South, Western Edition, Singapore.

16.8 ACTIVITIES

1. Analyse the need of introducing healthy and safety-working environment in industries.

2. Explain health and safety conditions and its remedial measures in industries.
3. Write a note on Management Commitment and Safety.