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FROM THE DESK

Till recently, Occupational Health Services in industry was not getting the importance, which was its due. A large number of factors were responsible for this, including apathy on the part of the management, some misplaced fear in the minds of the workers and under reporting of occupational diseases. But it is heartening to note that now all concerned have realized the importance of setting up of occupational health service and occupational health center within the industry itself.

The cover feature of this issue discusses the essential ingredients of an occupational health service and also some models for its effective functioning. Auditing of the existing system has also been stressed upon. It is not necessary that audit for occupational health service should be done separately. But it is essential that it should at least form a part of the general audit, which an industry should undertake to see the effectiveness of its safety management programme.

There is a second article on development of a workstation for a special activity in the garment manufacturing industry written by one from within DGFASLI and another from the National Institute of Fashion Technology, Mumbai. This is the first time we are publishing an article from a guest contributor. I renew my request to the researchers in different areas of safety and health to contribute their articles for publication in the INDOSHNEWS.

S.K.SAXENA
EDITOR-IN-CHIEF

MODERN CONCEPT OF OCCUPATIONAL HEALTH SERVICE

DR. S. K. HALDAR

Occupational Health Services

OHS are human-service organizations in modern society which have been explicitly designed to manage and promote the safety, health and welfare of citizens at work.

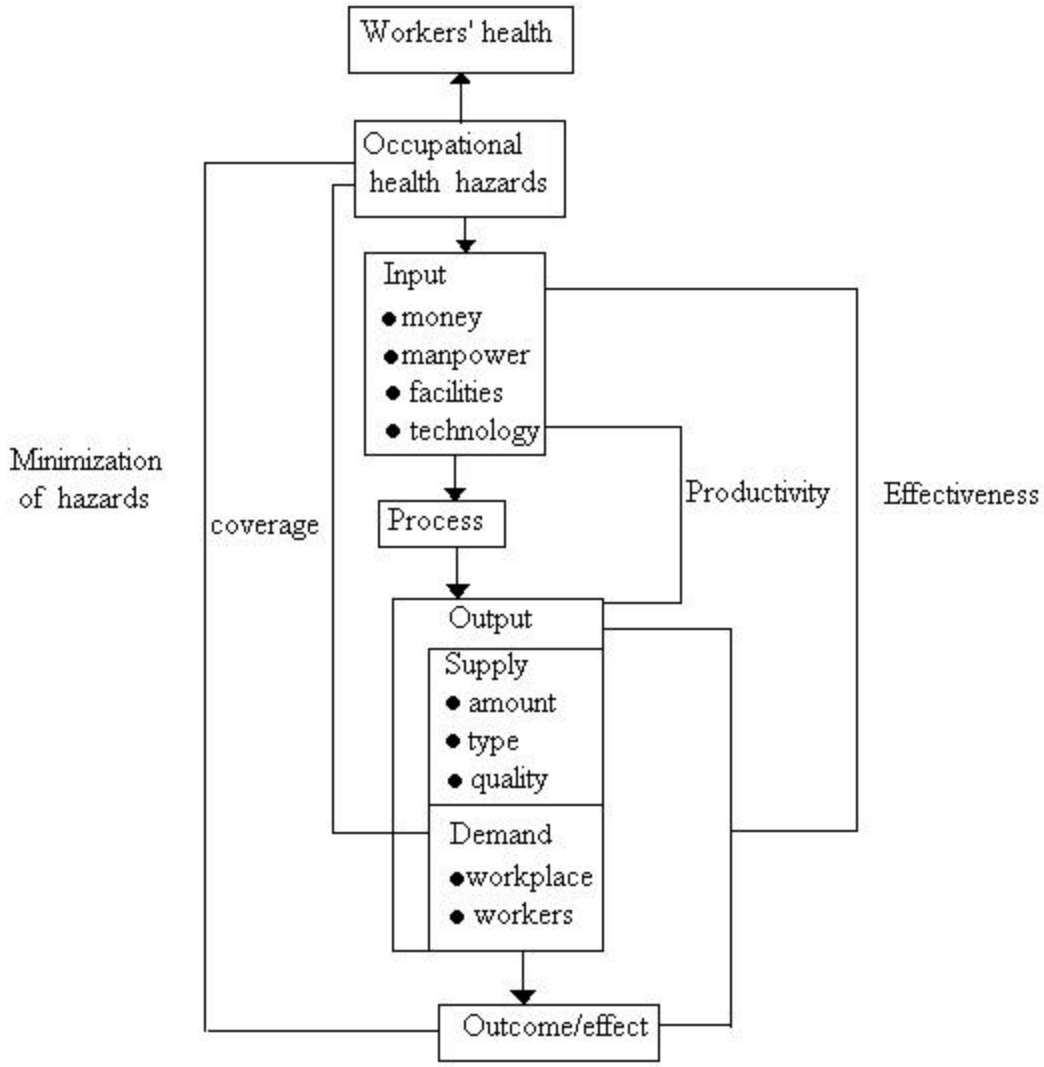
Occupational Health Professionals

1. Occupational Health Physicians & nurses
2. Physiotherapists and Ergonomists
3. Occupational hygienists
4. Safety Engineers
5. Occupational psychologists
6. Managers of OHS units or organizations

The overall objectives of OHS can be regarded as being embodied in five principles

- Protect workers against hazards at work (the protection and prevention principle).
- Adapt the work and the work environment to the capabilities of workers (the adaptation principle).
- Enhance the physical, mental and social well-being of workers (the workplace health-promotion principle).
- Minimize the consequences of occupational hazards (accidents and injuries) and occupational and work-related diseases (the cure and rehabilitation principle)
- Provide general health care services for workers and their families, both curative and preventive, in the workplace from nearby facilities (the general health care principle).

THE SYSTEM MODEL FOR OHS :



Occupational health hazards, elements of OHS and their interrelationships

In the risk-oriented preventive occupational health arena, the main goal of OHS is to eliminate or minimize hazards so as to further workers' health (the protection and preventive principle). The outcome of occupational health service should be tangible in terms of occupational health hazards.

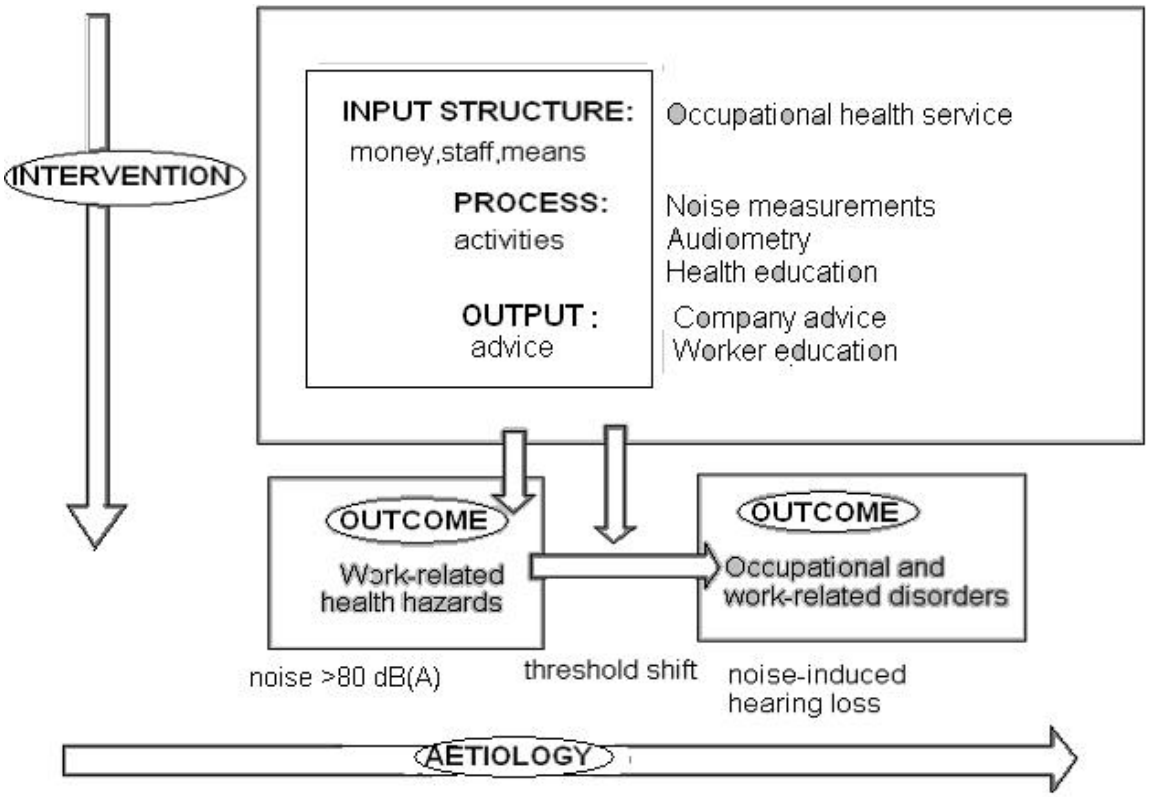
Input into OHS system – as represented by its resources – include money, manpower, facilities and technology made available for service provision. Input is transformed into output through the process of system. Output can be divided into supply and demand, the former referring to the amount, type and quality of services, the latter to realize demand from workplaces and their workers. Output is the advice from OHS professionals, and effect or outcome is the result in terms of better employees' health or diminishes health hazards.

Understanding relationships between elements in each OHS subsystem is essential to analysis and evaluation of the system's aspects.

The systems concepts given on the right-hand side of the above Figure refer to technical aspects. The relationship between output and input is called productivity. Outcome and effect are related to output through effectiveness, and effectiveness is related to input through efficiency, which is often the most important technical systems concept. The system concepts given on the left-hand side of the above Figure refer to aspects showing the relationships of various system elements to the essential systems objective, namely the prevention of occupational health hazards. Demand is related to occupational health hazards through coverage, which is understood here to refer to OHS that are actually used (i.e. not to services that are available but not used). Finally, there is the most important systems concept, which is the relationship between system outcome and occupational health hazards. This is called the 'minimization of hazards', on the ground that this relationship reflects the results of the occupational health system in terms of its main programme objective.

The systems model provides a good way of reducing an OHS programme or intervention to its basic elements. But it is important to note that we have to measure both process and output to understand why an intervention has been (un)successful. And often it is more feasible to perform only a process evaluation. It is more sensitive than an outcome evaluation, and its results will be available within a much shorter time period.

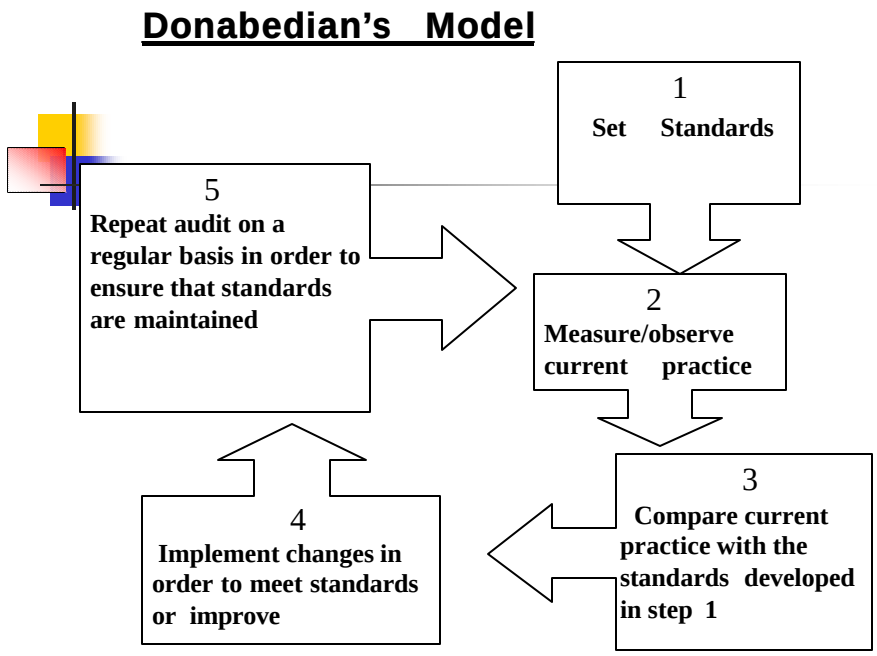
MODEL FOR OCCUPATIONAL HEALTH



The above Figure shows the most important elements in a model for occupational health. The arrow at the bottom represents the causal processes that lead to occupational diseases, work-related disorders, or occupational disabilities. It is the main goal of OHS to prevent these problems, either by intervening in the causal process or by eliminating their causes directly. This is clarified in the figure by using italics to demonstrate an example of noise and hearing problems. A decrease in the incidence and prevalence of such problems is usually called the **outcome** of an occupational health intervention. Figure on such health outcomes can be used to measure the quality of OHS. The greater their ability to improve the outcome, the better is its quality. But before conclusions are drawn solely on the basis of outcome, we should take a look at the service **process**.

The vertical arrows in the figure represent different aspects of the interventions that make up the core of occupational health. Jointly, we call them the **process** of occupational health intervention. Here, it is also useful to look at **input** in terms of finances, professional resources and instruments – i.e. the **structure** that makes it possible to carry out the process. And process usually generates some form of **output,** such as concrete advice to a company or worker.

Occupational Health Audit – the modern concept of OHS activity:



The common model for occ. health audit

This 'audit spiral' helps to set standards, observe practice and compare current practice against the identified standard. In this model, changes can be introduced to ensure that the consistency of practice is maintained or to further improve the quality of practice. The standards set should be subjected to a rigorous process of continuous review, which takes account of new research and information generated from the audit process.

Reference

Evaluation in Occupational Health Practice – by Ewa Menckel & Peter Westerholm.

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DEVELOPMENT OF A WORKSTATION FOR PACKING OF CARTONS IN THE GARMENT MANUFACTURING INDUSTRY

DR R IQBAL & KAUSHIK GORAHAVA

INTRODUCTION:

The Indian ready-made garment industry is growing by leaps and bounds due to increasing demand in the domestic market as well as increase in exports. This industry is covered under the small scale sector. Majority of the units in this industry today are in the small scale unorganized sector. The large scale manufacturing units are few in number. India has a large number of ready-made garment manufacturing units which employ a huge population. The apparel manufacturing industry is labor intensive, rather than a capital intensive endeavor. Like any other manufacturing industry, apparel manufacturing industry has a fair share of ergonomic problems (Nag et al, 1992). In the developing nations like India, China and the Asia-pacific countries where most of the apparel production takes place for supply to the markets of the developed nations, awareness about ergonomics is beginning to rise and thus measures are getting initiated to make the workplace more ergonomically designed, to achieve optimum productivity with no injuries to workers.

PROBLEM

Musculo-skeletal pain in various body parts have been reported by the packing operators during work and also after work. The job performed in the packing department is manual material handling. The sequence of operations in a garment manufacturing factory is:

1) cutting of garment parts (in bulk) in the cutting room
2) assembling of the cut garment parts in the sewing department
3) button attachment, thread cutting, quality inspection, ironing and packing of the garments in the finishing department.

After the garments are stitched and pressed, they are bought to the packing section, where the garments of various sizes and colors are filled into individual poly-bags, sealed with a tape, then sorted as per their color and size, and piled up on the floor. No furniture is provided to the workers working in the packing department.

The jobs carried out in the packing section are :

1) WORK : Putting individual garments into poly bags
   POSTURE ADOPTED: Squatting on the floor (sometimes standing at a table).

2) WORK: Pilling up poly bagged garments as per their size and color ratios.
   POSTURE ADOPTED: Squatting on the floor.

3) WORK: Filing up the cartons as per the size and color ratio and sealing the cartons with a strap / tape.
   POSTURE ADOPTED: Frequent bending to handle material lying on the floor.

Thus the musculo-skeletal pain is the result of awkward and faulty postures like continuously squatting and frequent bending during work.

AIMS AND OBJECTIVES

The aim of the study is to design a workstation for the packing operation that will help the packing operators to –

a) work in a proper posture that will reduce postural stress;
b) prevent / minimize occupational health problems; and
c) delay the onset of fatigue and improve productivity.

RESULTS AND DISCUSSION

Occupational feed back was recorded from 30 packing operators and the major physiological problems are occupational pain as under:

Sr No	Physiological problems	Percentage (%)
1	Back pain	43.3
2	Knee pain	30.0
3	Shoulder pain	23.3
4	General body pain	63.3
n = 30		

The packing work is quite intermittent. A particular style of garment takes 10 to 25 days to manufacture, the packing being the last operation is done after completion of manufacturing process. When packing starts, it takes 8 to 20 hours to complete and the workers work continuously as the delivery date of the export order has to be met and the orders has to be shipped.

The physiological problems can be attributed to the postures adopted while working:

SQUATTING POSTURE gives rise to knee pain and back pain, tingling and numbness of the legs due to hindered blood circulation to the legs and thighs (Corlett et al 1984, Nag et al, 1992).

SCIATICA- It is a nerve in the legs which gets stretched, and results in back pain, leg pain and numbness of the foot. Blood Supply to thighs and legs is hindered (Kroemer and Grandjean 1997). It is advisable to take a break every one hour or quarter of an hour and stand up and move about.
BENDING POSTURE gives rise to lower back pain (Kroemer and Grandjean 1997).

Design of workstation for the packing department

Based on the operation and working posture, a workstation for packing operation has been developed (Fig 1 & 2). The workstation has been developed as per standard anthropometric data pack (Saha et al 1988).

An ideal workstation for the packing department would be a wooden furniture, with an inclined L-shaped wooden shelve, which can hold the carton in an inclined position while it is getting filled with garments.

The working height of this workstation has been made adjustable between the (A) 5th percentile and (B) 95th percentile value of wrist height from floor. This will make it easy for the workers to place the poly-bagged garments into the cartons.
The L-shaped shelve can be adjusted with the help of a C-shaped wooden frame, which is hinged to the L-shaped shelve. The three dimensions of the L-shaped shelve have been decided by considering the maximum dimensions of the carton to be, 24 inch length, 12 inches in height and 24 inches in width . The value of L has been taken as eighteen inch and the carton of maximum size will have an overlap of six inch in length and since the center of gravity will not go beyond the point of support the carton will not topple in the length direction. The breadth of the workstation has been finalized as sixteen inch. The carton of maximum size will have an overlap of four inch on both sides in the breadth direction. The height H of the L-shaped shelve has been finalized as eight inch and so the

carton of maximum size will have an overlap of four inch in the height direction. Since the center of gravity will always be supported, even the carton of maximum size will be stable and adequately supported on the L-shaped shelve.

The poly-bagged garments can be piled up on to a table as per their size and color ratio. This table can be placed beside the workstation, so that the worker can pick up the garments from the table and place them into the carton placed on the L-shaped shelve. The table would ideally have fencing on three sides, to avoid the poly bagged cartons from slipping from the table onto the floor. After filling the required number of garments into the cartons, the worker can push the carton onto the table ahead; by lifting the L-shaped shelve.

The carton will slide and fall onto the table which is designed to have a height of (C) (50th percentile waist level height) 88 cm. Alternatively, if an automatic strapping machine is used, then this table may be replaced by the automatic strapping machine.

CONCLUSION

This workstation designed in the present study will provide the following benefits:

1) Eliminate awkward working posture like squatting, bending frequently to pick up garments lying on the floor. This will reduce the physiological fatigue faced by workers and increase their endurance time.

2) Utilize the principle of manual material handling in which material should be made to slide from one point to other rather than lifting it, thus reducing muscular effort.

3) Reduce the requirement of floor area for sorting and packing of poly bagged garments.

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Kroemer KHE and E. Grandjean: Fitting The Task To The Human, A Textbook of Occupational Ergonomics. Taylor And Francis, Fifth edition, pp 512-513, 1997.

Nag A, Desai H, and Nag PK: Work Stress of Women in Sewing Machine Operation Journal of Human Ergol., Volume 21, pp 47-55, 1992.

Saha PN, Narayane GG and Metkari, MA: Anthropometric studies on Industrial workers in eastern and western regions. Central Labour Institute, Sion, Bombay, 1988.

Websites:
1) http://www.osha.gov/
2) www.3m.com
3) http://www.ccohs.ca/
4) http://www.ergonomics.org.uk/

Fig 1: Workstation for packing operation

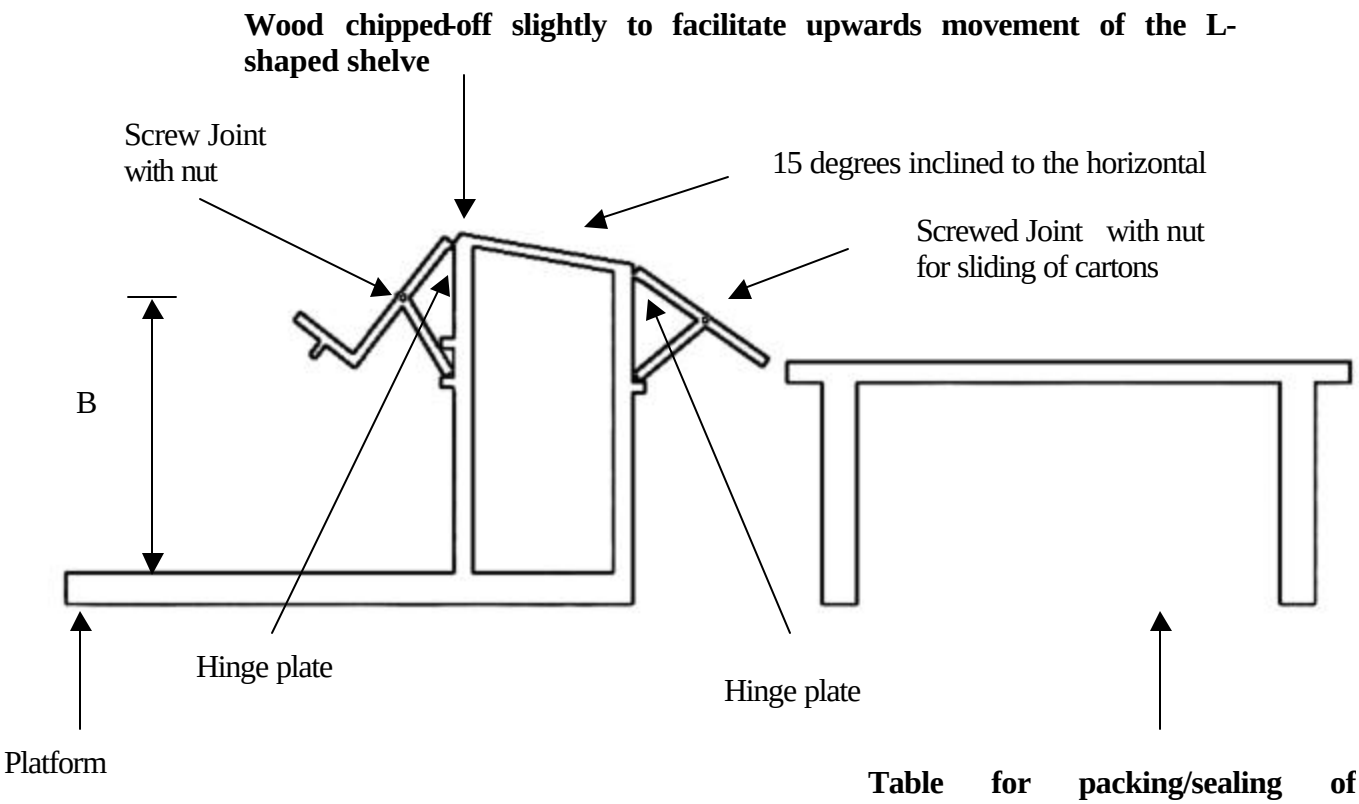
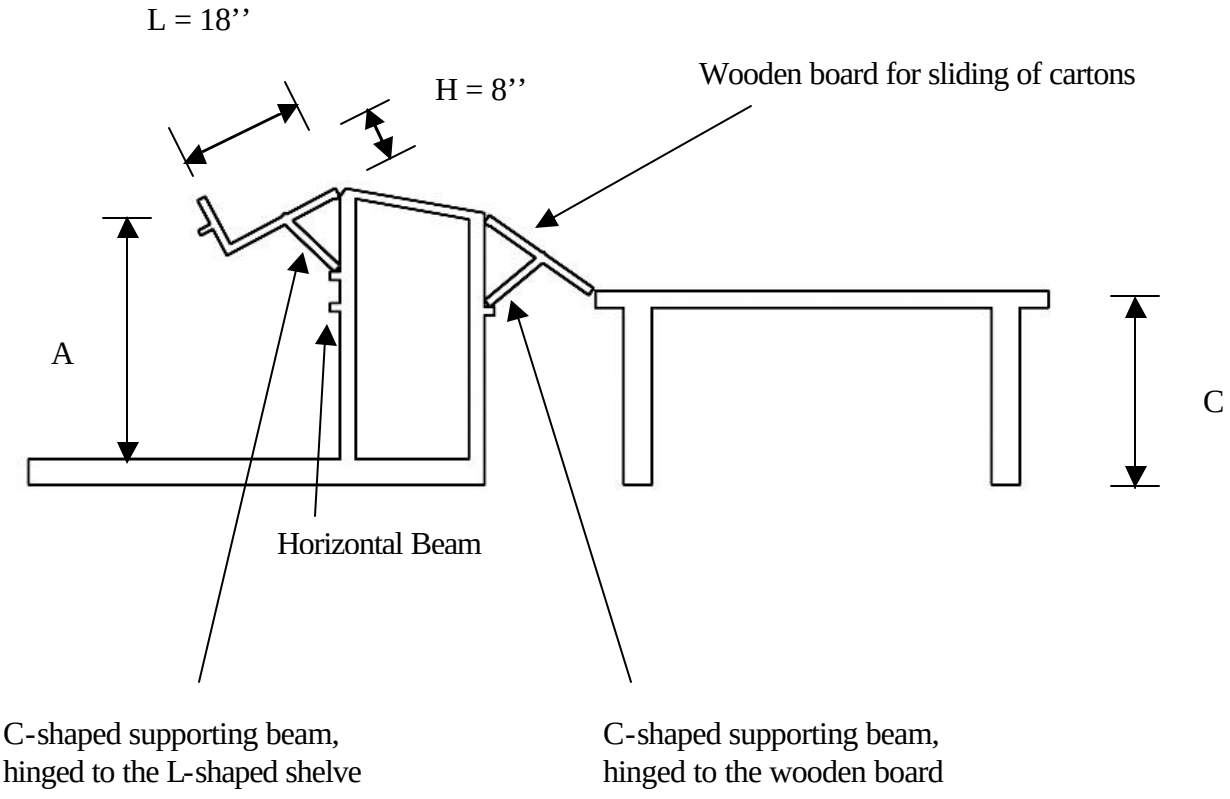


Fig 2: Workstation dimensions



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Mumbai

EVALUATION OF FIBRE DUST LEVELS IN AN ASBSESTOS CEMENT SHEETS COMPANY

This study was carried out by Regional Labour Institute, Chennai in a company engaged in the production of corrugated asbestos cement sheets for roofing and other applications.

OBJECTIVE

The study was conducted with the objective to assess the airborne fibre dust levels in work environment and to suggest remedial measures wherever necessary to improve the work environment.

FINDINGS & RECOMMENDATIONS

Airborne levels of asbestos fibres at all the locations in production area and general atmosphere surrounding the Plant were found well below the permissible level of asbestos fibre i.e. 1 fibre/cc. However, precautionary and remedial measures were suggested to further improve the environmental conditions which included prompt repair of the damaged fibre bags, periodic checking of efficiency of bag filters, filing of AC sheets in wet condition, sprinkling of water while manually breaking the sheet scrap, effective use of respirators among workers, etc.

SAFETY AUDIT IN A PULP & PAPER MANUFACTURING PLANT

This safety audit was carried out by Regional Labour Institute, Kanpur in a pulp & paper manufacturing plant.

The factory manufactures about 200 tones of paper every day and employs about 2200 persons including contract workers.

OBJECTIVE

The objectives of the safety audit were to identify hazards in the plant processes, to evaluate deviations in the plant from the designated and standard plant operating and maintenance procedures, etc. and to suggest preventive measures to improve overall safety and health system in the factory.

METHODOLOGY

Safety audit discussions were held with plant management personnel and plant procedures, inspection, maintenance and safety systems were studied. A thorough inspection of plant areas was also carried out to gather information about the plant conditions. Cellulosic materials like eucalyptus, pine and bamboo were the raw materials for the manufacturing of paper.

Safety Management, Storage of Chemicals and Process Safety aspects were covered during the safety audit.

RECOMMENDATIONS

Based on the observations and discussions, several recommendations were made in the report to improve the safety management system of the factory. Some of the main recommendations were periodic safety inspections of the plant with the help of checklist, introduction of permit to work system for entry into confined space, working at height and electrical maintenance, periodic monitoring of work environment for different physical and chemical contaminants, need of full fledged Occupational Health Center with facilities as prescribed in U.P. Factories Rules 1950 & medical Officer possessing a certificate of training in Industrial Health and ambulance van in readiness with stipulated facilities.

Several recommendations were made in the report for safe storage of different chemicals/materials. Some of those are proper earthing on the furnace oil storage tank with proper maintenance vent level gauge and dyke, availability of hose reels in the timber yard, suitable first aid in the yard area, proper maintenance of neutralization

pit in chlorine tonner storage area till caustic scrubbing system is not developed, manholes level gauge, etc. on Hydrogen Peroxide and Sulphamic Acid service tanks in the bleach plant, storage of incompatible chemical substances away from each other in chemical store, etc.

TRAINING PROGRAMME ON RISK ASSESSMENT AND EMERGENCY PLANNING FOR PROCESS INDUSTRIES

PROGRAMME PERSPECTIVE

The growth in demand of chemicals and advances in technology has resulted in an increase in size of chemicals and associated plants using hazardous chemicals. Large chemical complexes have been formed by the integration of related and inter-dependent processes on single site. In spite of high standard of care normally exercised with such plants, accident may still occur. Consequence of such an accident (Fire, Explosion and Toxic release) may affect not only plants, facilities and personnel within the site but also a larger number of people, amenities and buildings in the surrounding area. A well developed Emergency Plan plays a greater role in minimizing the effects of such accidents. In accordance with the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, an Occupier has to prepare an Emergency Plan for dealing with major accidents on their sites.

OBJECTIVE

To develop mitigation and control related strategies to minimize damage to life, properties and environment due to major accident by familiarizing the participants with-

- The statutory obligations
- Hazard identification and assessment techniques
- Methods of control and mitigation of emergency
- Guidelines for preparation of emergency plan & safety report.

HIGHLIGHTS

- Statutory Obligations
- Techniques of Hazard identification
- Hazardous Chemical Processes
- Fire & Explosion Impact Assessment (BLEVE, UVCE & POOL FIRES)
- Toxic Release and impact assessment
- Dispersion modeling
- Software demonstration
- Emergency plan

THE PARTICIPANTS

Senior Plant Operators, Engineers, Managers and Safety Officers of Process Industries.

MODE OF TRAINING

- Audio Visual
- Syndicate Exercises
- Case Studies

Conducted by

MAHCA DIVISION, Central Labbour Institute, Sion, Mumbai.400022

INTERNATIONAL OCCUPATIONAL SAFETY AND HEALTH INFORMATION CENTRE (CIS)

CIS (from the French name, Centre international d'Information de securite et d'hygiene du travail) i.e. International Occupational Safety and Health Information Centre, is a part of the International Labour Office, Geneva, Switzerland. The mission of CIS is to collect world literature that can contribute to the prevention of occupational hazards and to disseminate this information at an international level. CIS imparts to its users the most comprehensive and up-to-date information in the field of Occupational safety and health. The work of CIS is supported by a worldwide Safety and Health information exchange network which includes over 91 affiliated National Centres and 38 CIS collaborating Centres. Central Labour Institute, Mumbai has been designated as the CIS National Centre of India.

CIS can offer you rapid access to comprehensive information on occupational safety and health through:

- Microfiches on original documents abstracted in CIS DOC (CISILO)
- ILO CIS Bulletin "Safety and Health at Work"
- Annual and 5-year indexes
- The CIS Thesaurus
- The list of periodicals abstracted by CIS

EXCERPT FROM CIS DOC

Title: Influence of participation in a worksite health-promotion program on disability days.

CIS ACCESSION NUMBER
CIS 03-645

ABSTRACT

The study assessed the impact of participation in a health promotion programme on short-term and long-term sickness absenteeism during a six year period in an industrial enterprise. 4189 male employees were followed from 1995 to 2000. Sickness absenteeism was compared for programme participants and non-participants from baseline (1995) through the 5 years of the programme. The percentage of non-participants absent on any given day was greater than that of participants. Moreover, the average number of days of absence incurred by non-participants significantly increased from baseline to programme year 5 compared with participants. The total amount saved each year in days of absence for the 2596 program participants was USD 623,40, which resulted in a savings-to-cost ratio of 2.3.

Note:

For details write to CIS National Centre for India, Central Labour Institute, Sion, Mumbai 400 022.

The Library & Information Centre of Central Labour Institute has unique collection of Material Safety Data Sheet of about 1,20,000 chemicals/materials taken from Canadian Centre for Occupational Health & Safety. MSDS provides extensive coverage over safety perspective with detailed evaluation of health, fire and reactivity hazards. It also provides precaution as well as recommendation on handling, storage, personal protective equipment, accidental release, etc.

PRODUCT NAME(S) : CALCIUM OXIDE

HAZARDS IDENTIFICATION

Potential Acute Health Effects:Very hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation. Corrosive to eyes and skin. The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

FIRST AID MEASURES

Eye Contact : Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention. Skin Contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Hazardous Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Hazardous Inhalation: Not available.
Ingestion :If swallowed, do not induce vomiting. Have conscious person drink several glasses of water or milk. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Hazardous Ingestion: No additional information.

ACCIDENTAL RELEASE MEASURES

Small Spill : Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill : Corrosive solid. Stop leak if without risk. Pick up solids and put in an appropriate sealed container for later disposal. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

HANDLING AND STORAGE

Precautions : Keep container dry. DO NOT ingest. Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or

the label. Avoid contact with skin and eyes. Keep away from incompatibles such as organic materials, acids, moisture.
Storage : Keep container tightly closed. Keep container in a cool, well-ventilated area.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection : Splash goggles. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Dust respirator. Gloves.

Personal Protection in case of a Large Spill: Splash goggles. Full suit. Boots. Gloves. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Dust respirator.

STABILITY AND REACTIVITY DATA

Stability : The product is stable.
Instability Temperature: Not available.
Conditions of Instability: Not available.
Incompatibility with various substances: Reactive with organic materials, acids, moisture.
Corrosivity : Not available.
Special Remarks on Reactivity : Absorbs CO2 from air. Reacts with fluorine to evolve heat and light.
Special Remarks on Corrosivity: Not available.
Hazardous Polymerization: Will not occur.

TOXICOLOGICAL INFORMATION

Routes of Entry skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals LD50: Not available.
LC50: Not available.
Chronic Effects on Humans : CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.
Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage.

Other Toxic Effects on Humans :Very hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation. Corrosive to eyes and skin. The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

NOTE

The above details constitute part information of MSDS taken from Canadian Centre for Occupational Health and Safety. For complete MSDS write to MIS division, Central Labour Institute, Sion, Mumbai.400022. MSDS on about 1,20,000 chemicals/materials are available with Central Labour Institute. Computer printout will be supplied on nominal charge basis.

6000 DIE EVERY DAY DUE TO HAZARDOUS WORK: ILO

Hazardous work kills more people than war. As many as 6,000 people are killed every day while working in hazardous industries the world over.

This astounding fact comes out in the latest issue of 'World of Work', the quarterly magazine of the International Labour Organisation (ILO).

Quoting from the ILO report published earlier this year on the occasion of the World Day for Safety and Health at Work (April 29), it said, "Some 6,000 workers die every day from occupational accidents and diseases".

The ILO report said that "work-related accidents and illnesses worldwide cause more deaths than war." Of the almost 270 million accidents recorded each year, 350,000 result in fatalities, the report said. This means that one in every 771 accidents is fatal. About 2.2 million work-related fatalities and 60 million work-related illnesses occur annually, of which 400,000 are attributable to hazardous substances. The grim toll requires more effective control, in line with ILO conventions and the implementation of safety measures as the first steps towards creating a global "safety culture", the report notes.

"I strongly believe that this is one of the most fertile areas for reaching consensus in the world of work," ILO Director General, Juan Somavia said in his message for the Day. Last year, ILO had adopted April 28 as World Say for Safety and Health at Work.

Source: Times of India

TRAINING PROGRAMMES
OCTOBER-DECEMBER 2004
CENTRAL LABOUR INSTITUTE ,SION,
MUMBAI-400 022

Programme title	Contact person
Diploma in Industrial Safety	Director (Safety) & Incharge Indl. Safety Division
Safety,Health & Environment Management in Fertilizer Industry.	Director (Indl.Hygiene)&Incharge Indl.Hygiene Division
Fatigue & Rest Allowances - its Application in industry for Safety, Health and Productivity.	Director (Physiology) & Incharge Indl. Physiology Division
Chemical Safety and Major Accident Hazard Control.	Director (Indl.Hygiene) & Incharge Major Accident Hazard Advisory Division
Workshop on Anthropometry – its application for ideal Work station Design for Safety, Health and Productivity.	Director (Physiology) & Incharge Indl.Ergonomics Division
Productivity and Quality Improvement through effective employees participation.	Director (Staff Trg./Productivity) & Incharge Productivity Division
Training Programme on Industrial Safety for NSC, Maharashtra Chapter.	Director (Safety) & Incharge Indl. Safety Division
Handling Problem Behaviour & Employees	Director (Indl.Psychology) & Incharge Indl.Psychology Division
Training Methodology for Trainers (TMT)	Director (Staff Trg./Productivity) & Incharge Staff Training Division
Occupational Physiology – its application in Industry for promotion of Safety, Health & Productivity.	Director (Physiology) & Incharge Indl. Physiology Division
Workshop on Measurement and Improvement of Illumination Levels in the work place	Director (Physiology) & Incharge Environmental Engg.Division

Industrial Fatigue – its evaluation Management for ensuring Safety, Health & Productivity at work	Director (Physiology) & Incharge Indl. Physiology Division
Selection and Quality Assurance For Effective use of PPE	Director (Indl.Hygiene)&Incharge Indl.Hygiene Division
Advanced Training Programme on Occupational Health & Environmental Medicine for Medical Officers	Director (Medical) & Incharge Indl. Medicine Division
Training Programme on Safety Engineering and Management	Director (Safety) & Incharge Indl. Safety Division
Safety, Health & Environment Management in Process Industries	Director (Indl.Hygiene) & Incharge Major Accident Hazard Advisory Division
Industrial Ergonomics – its application in Industries for Promotion of Safety, Health & Increased Productivity at Work	Director (Physiology) & Incharge Indl.Ergonomics Division
Managerial Excellence for higher performance	Director (Staff Trg./Productivity) & Incharge Productivity Division
Leadership for Safety, Health & Productivity	Director (Indl.Psychology) & Incharge Indl.Psychology Division
Industrial Heat Stress & Heat Disorders – its evaluation and management for ensuring Safety, Health & Productivity at work.	Director (Physiology) & Incharge Indl.Ergonomics Division

TRAINING PROGRAMMES
OCTOBER-DECEMBER 2004
REGIONAL LABOUR INSTITUTE , LAKE TOWN
KOLKATA-700 089

Programme title	Contact person
Safety Audit	Director Incharge
Safety & Health for workers	Director Incharge
Appreciation course on Industrial Hygiene	Director Incharge
Specialised Certificate Course for Supervisors engaged in Hazard Industries.	Director Incharge
Refresher Course on Occupational Health for Plant Medical Officers	Director Incharge
Training Programme on Chemical Safety	Director Incharge

TRAINING PROGRAMMES
OCTOBER-DECEMBER 2004
REGIONAL LABOUR INSTITUTE , NO.1,SARDAR PATEL ROAD
ADYAR, CHENNAI-600 113

Programme title	Contact person
Diploma Course in Industrial Safety	Director Incharge
Training Programme on Major Accident Hazard Control in industries	Director Incharge
Certificate Course in Safety & Health for Supervisory Personnel engaged in Hazardous Processes	Director Incharge

TRAINING PROGRAMMES
OCTOBER-DECEMBER 2004
REGIONAL LABOUR INSTITUTE, SARVODAYA NAGAR
KANPUR- 208 005

Programme title	Contact person
Diploma Course in Industrial Safety	Director Incharge
Workshop on HAZOP	Director Incharge
One month Certificate Course On Safety & Health	Director Incharge
Training programme on Industrial Safety and Health	Director Incharge
Training Programme on Effective Supervision in managing Safety, Health and Better Environment	Director Incharge

INDOSHNET

Ministry of Labour, Government of India, is developing a National Network on Occupational Safety and Health information system known as INDOSHNET. Directorate General Factory Advice Service & Labour Institutes (DGFASLI), an attached office of the Ministry of Labour will act as a facilitator of the network system. The objective of the network is reinforcement and sharing of national occupational safety and health (OS &H) information on no-profit no-loss basis with a view to pooling our information resources for mutual benefit. The sharing of information will not only confine to the national level but also includes international sources. The communication of information will be through E-mail as well as postal/courier service. DGFASLI invites industrial organisations, institutions, industry associations, trade unions, professional bodies and non-governmental organisations having information on OS&H and willing to share the same with others at the national and international level to participate as members in the network. Interested agencies may please write for proforma of organisational profile to Director General, DGFASLI, Central Labour Institute Bldg., N.S. Mankikar Marg, Sion, Mumbai 400 022.

Note: Those who have responded to our earlier communication and sent organisation profile in the prescribed format need not write again.

NATIONAL REFERRAL DIAGNOSTIC CENTRE

Early detection and diagnosis of occupational health disorders and occupational diseases is one of the most important factors in the prevention and control of adverse health effects on workers due to various factors - physical, chemical, biological and psycho-social. The Industrial Medicine Division of Central Labour Institute, Mumbai runs a National Referral Diagnostic Centre (N.R.D.C.) for early detection and diagnosis of occupational diseases and recommends necessary measures for prevention/control of occupational health problems/occupational diseases. The diagnostic centre is well equipped for medical examination of the exposed workers and facilities are available for carrying out special investigation, e.g. Pulmonary function tests, Audiometry, ECG, Titmus vision test, Biological monitoring, etc. Medical professionals including Factory Medical Officers, ESI Doctors, Medical Inspectors of Factories and Certifying Surgeons, Doctors from Medical Colleges and Hospitals can refer suspected cases of occupational diseases to N.R.D.C. for diagnosis and advice. The communication should be addressed to the Director General, DGFASLI, Central Labour Institute Bldg., N.S. Mankikar Marg, Sion, Mumbai 400 022 for further details.

INDOSHNEWS is a quarterly newsletter that facilitates exchange of ideas and data developed through research, study and surveys in the areas of occupational safety and health. DGFASLI invites articles from individuals, industry, industrial associations, trade unions, professional bodies etc. having information on OS & H and willing to share the same with others at the national and international level.

1. **Manuscripts for publication should be typed in double space within 3 to 4 A4 size sheets only on one side of the paper and sent in duplicate to the Editor-in-Chief. No photographs can be published.**

2. **Once the manuscripts are accepted for publication, publisher reserves the right to make editorial changes as may be necessary to make the article suitable for publication; and publisher reserves the right not to proceed with publication for whatever reason.**

3. **Authors should take care to ensure the accuracy of data and reference.**

GOVERNMENT OF INDIA, MINISTRY OF LABOUR
DIRECTORATE GENERAL FACTORY ADVICE SERVICE & LABOUR INSTITUTES

The Directorate General Factory Advice Service & Labour Institutes (DGFASLI) is an attached office of the Ministry of Labour, Government of India. DGFASLI organization was set up in 1945 under the Ministry of Labour, Government of India to serve as a technical arm to assist the Ministry in formulating national policies on occupational safety and health in factories and docks and to advise State Governments and factories on matters concerning safety, health, efficiency and well-being of the persons at workplace. It also enforces safety and health statutes in major ports of the country.

The Directorate General Factory Advice Service & Labour Institutes (DGFASLI) comprises:

* Headquarters situated in Mumbai
* Central Labour Institute in Mumbai
* Regional Labour Institutes in Kolkata, Chennai, Faridabad and Kanpur

The Central Labour Institute in Mumbai functions as a socio-economic laboratory and is a national institute dealing with the scientific study of all aspects of industrial development relating to the human factors.

Over the past 33 years the Central Labour Institute has constantly grown not only in size but also in stature and has earned national and international recognition. It has been recognised by the International Labour Organisation as a Centre of Excellence in training on Occupational Safety and Health in the Asian and Pacific Region. It also functions as a National Centre for CIS (International Occupational Safety and Health Information Centre) and the Centre for National Safety and Health Hazard Alert System. At the national level, apart from providing research and training support to the Government and functioning as a technical arm of the Ministry of Labour, the institute provides comprehensive and multi-disciplinary services to the Industrial Port sector through studies, technical advice, training and dissemination of information. It also runs National Referral Diagnostic Centre for early detection of occupational disorders and thereby controls and prevents them. It has a modern Audio Visual Studio fully equipped with sophisticated video production equipment to produce quality U-matic video films on Safety and Health. The Regional Labour Institutes are a scaled-down version of the Central Labour Institute and cater to the needs of their respective regions.

The organization is poised to grow further, and meet the increased demands on it. In a developing country with a large number of industries having diverse and complex nature, the task of protecting safety and health of workers is an uphill task. Armed with the technology, good will of the industrial society and the strength of the dedicated staff, the organization is well prepared to meet the challenges of tomorrow. It is committed to the goal of making the workplace safer.

Visit us at : www.dgfasli.nic.in