

# Editorial

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## OCCUPATIONAL HEALTH

### INTRODUCTION

#### What is Occupational Health and Safety?

Occupational health and safety is a discipline with a broad scope involving many specialized fields. In its broadest sense, it should aim at:

- The promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations.
- The prevention among workers of adverse effects on health caused by their working conditions.
- The protection of workers in their employment from risks resulting from factors adverse to health.
- The placing and maintenance of workers in an occupational environment adapted to physical and mental needs.
- The adaptation of work to humans.

In other words, occupational health and safety encompasses the social, mental and physical well-being of workers, that is the “whole person”.

Successful occupational health and safety practice requires the collaboration and participation of both employers and workers in health and safety programs, and involves the consideration of issues relating to occupational medicine, industrial hygiene, toxicology, education, engineering safety, ergonomics, psychology, etc.

Overall, efforts in occupational health and safety must aim to prevent industrial accidents and diseases, and at the same time recognize the connection between worker health and safety, the workplace, and the environment outside the workplace.

#### Causes of Occupational Diseases

There are various modes of development of occupational diseases. Some are only occupational in origin, such as silicosis or asbestosis, which are caused by exposure to silica dust or asbestos fibers, respectively. In some diseases the occupation is one of the causal factors whereas in others the occupation is a contributing factor (for example: chronic bronchitis). There are also cases in which an individual's occupation may aggravate a preexisting condition (as in bronchial asthma).

**An individual may be exposed to five types of hazards, depending upon his/her occupation:**

1. *Physical hazards:* Heat, cold, light, noise, vibration, ultraviolet radiation and ionizing radiation are all known to give rise to problems if the individual is exposed to levels beyond acceptable limits without protective measures.
2. *Chemical hazards:* Toxic, corrosive, allergenic and carcinogenic chemicals act by local action, inhalation and ingestion on exposure to concentrations beyond the threshold limit value (TLV).
3. *Biological hazards:* Workers may be exposed to infectious and parasitic agents at the workplace. Persons working with animal products and agricultural workers are likely to be exposed to biological hazards.
4. *Mechanical hazards:* The mechanical hazards in industry center round machinery, protruding and moving parts and the like. About 10% of industrial accidents are due to mechanical causes.
5. *Psychosocial hazards:* These arise from the workers' failure to adapt to an alien psychosocial environment. Frustration, lack of job satisfaction, insecurity, poor human relationships and emotional tension are some of the psychosocial factors that may undermine both the physical and mental health of workers.

In addition to the above, new technologies like video display units and computers also bring with them new hazards and problems, such as repetitive strain injury or musculoskeletal disorders if not used properly. Ergonomics plays an important role in the prevention of such diseases.



Unfortunately some employers assume little responsibility for the protection of workers' health and safety. In fact, some employers do not even know that they have the moral and often legal responsibility to protect workers. As a result of the hazards and a lack of attention given to health and safety, work-related accidents and diseases are common in all parts of the world.

Work-related accidents or diseases are very costly and can have many serious direct and indirect effects on the lives of workers and their families. For workers, some of the direct costs of an injury or illness are:

- The pain and suffering of the injury or illness
- The loss of income
- The possible loss of a job
- Healthcare costs.

The joint International Labor Organization/World Health Organization Committee on Occupational Health, in the course of its first session held in 1950 stated: Occupational health should aim at the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention among workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological aspects and, to summarize, the adaptation of work to man and of each man to his job.

### **Indian Perspective**

The first Factories Act was passed in 1881 in British India. The Act was amended in 1891, 1911, 1923, 1934 and 1948 to bring the legislation in line with that of the British Factory Act. The Bhopal Gas tragedy (1984) was a turning point toward legislation pertaining to occupational health and safety in India. The Factories Act was amended in 1987. At present 29 diseases have been included as "Notifiable" Occupational Diseases under this Act.

The Government of India has accorded a prominent position to Occupational Safety and Health. Health care of workers is ensured by Inspection Services of the State Factory Inspectorates and Medical examination by the certifying surgeons.

In the industrial population, health care is usually provided by the management through the Employees State Insurance Scheme. As per the amended Factories Act, provision of an occupational health center is mandatory in factories carrying out hazardous processes.

### **Role of Occupational Health Services**

The scope of occupational health services (OHS) includes preventing occupational hazards at work, protecting workers against hazards at work, help in adapting work and the work environment to the capabilities of the worker, promoting the physical, mental and social well-being of workers, and cure and rehabilitation of accidental occupational injuries and to consider intervention measures, such as medical measures, engineering measures and legislative measures, etc. The OHS department should regularly undertake Health Promotion campaigns. It can initiate special programs for employees suffering from chronic diseases like diabetes, hypertension, etc., to prevent complications and preserve productivity of employees.

#### *Main Objectives of the OHS*

- To provide medical treatment and support in case of an emergency illness or accident.
- To monitor, manage and modify any adverse health effects which may occur at the workplace.
- To promote good health at the workplace.
- To plan and execute health education and awareness programs for employees.

#### *Major Activities at An Occupational Health Center*

Medical surveillance through measures, such as

- Periodic medical check-ups.
- Pre-employment medical check-ups.
- Medical treatment for illnesses and accidents.



- Conducting health education programs.
- Providing first aid and other related training to the employees.
- Promoting health awareness and wellness measures among employees.

## CONCLUSION

Doctors to note detailed occupational history, for qualitative patient management.

It is very essential for medical faculty to know about the policies, legislations, health insurance schemes, worker welfare measures, benefits for women workers for patients welfare measures, referral and follow-up. The information can be accessed through this website: Ministry of Labour, Government of India. <https://labour.gov.in/> & the following Document has the Requisite information.

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