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:

- promoting and maintaining the highest degree of physical, mental and social well-being of workers in all occupations;
- preventing adverse health effects caused by working conditions;
- protecting workers from risks in the workplace that could cause adverse health effects;
- creating and maintaining an occupational environment adapted to workers' physical and mental needs.

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. It involves issues relating to occupational medicine, industrial hygiene, toxicology, education, engineering safety, ergonomics, psychology, etc.

Occupational health issues (hazards that affect workers' health by causing illness, like chemical exposures) are often given less attention than occupational safety issues (hazards that put workers at risk for accidents, like improper equipment) because health issues are generally more difficult to confront. However, when health is addressed, so is safety, because a healthy workplace is by definition also a safe workplace. The reverse, though, may not be true – a so-called safe workplace is not necessarily also a healthy workplace. The important point is that issues of both health and safety must be addressed in every workplace. By and large, the definition of occupational health and safety given above encompasses both health and safety in their broadest contexts.

Poor working conditions affect worker health and safety

- Poor working conditions of any type have the potential to affect a worker's health and safety.
- Unhealthy or unsafe working conditions are not limited to the factory they can be found anywhere, whether the workplace is indoors or outdoors. For many workers, such as agricultural workers or miners, the workplace is "outdoors" and can pose many health and safety hazards.
- Poor working conditions can also affect the environment workers live in, since the working and living environments are the same

for many workers. This means that occupational hazards can have harmful effects on workers, their families, and other people in the community, as well as on the physical environment around the workplace.

- A classic example is the use of pesticides in agricultural work. Workers can be exposed to toxic chemicals in a number of ways when spraying pesticides:
 - they can inhale the chemicals during and after spraying;
 - the chemicals can be absorbed through the skin;
 - the workers can ingest the chemicals if they eat, drink, or smoke without first washing their hands, or if they drink water that has become contaminated with the chemicals.
- The workers' families can also be exposed in a number of ways:
 - they can inhale the pesticides which may linger in the air;
 - they can drink contaminated water;
 - they can be exposed to residues which may be on the workers' clothes.
- Other people in the community can all be exposed in the same ways as well. When the chemicals get absorbed into the soil or leach into groundwater supplies, the adverse effects on the natural environment can be permanent.

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

Why is occupational health and safety important?

Work plays a central role in people's lives, since most workers spend at least eight hours a day in the workplace, whether it is on a plantation, in an office, a factory, etc. Therefore, work environments should be safe and healthy. Yet this is not the case for many workers. Every day workers all over the world are faced with a multitude of health hazards, such as:

- dust;
- gases;
- noise;
- vibration;
- extreme temperatures.

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 legal responsibility to protect workers. As a result of hazards in the workplace and a lack of attention given to health and safety, work-related accidents and diseases are common in all parts of the world.

Costs of occupational injury/disease

Work-related accidents or diseases are very costly and 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:

- pain and suffering of the injury or illness;
- loss of income;
- possible loss of a job;
- health-care expenses.

It has been estimated that the indirect costs of an accident or illness, (like loss of wages for the worker which impacts the worker's family), can be four to ten times greater than the direct costs, or even more. An occupational illness or accident can have so many indirect costs to workers that it is often difficult to measure them. One of the most obvious indirect costs is the human suffering caused to workers' families, which cannot be compensated with money.

The costs to employers of occupational accidents or illnesses are also estimated to be enormous. For a small business, the cost of even one accident can be a financial disaster. For employers, some of the direct costs are:

- payment for work not performed;
- medical and compensation payments;
- repair or replacement of damaged machinery and equipment;
- reduction or a temporary halt in production;
- increased training expenses and administration costs;

- possible reduction in the quality of work;
- negative effect on morale in other workers.

Some of the indirect costs for employers are:

- the injured/ill worker has to be replaced;
- a new worker has to be trained and given time to adjust;
- it takes time before the new worker is producing at the rate of the original worker;
- time must be devoted to obligatory investigations, to writing reports and filling out forms;
- accidents often arouse the concern of fellow workers and influence labor relations in a negative way;
- poor health and safety conditions in the workplace can also result in poor public relations.

Overall, the costs of most work-related accidents or illnesses to workers and their families and to employers are very high.

On a national scale, the estimated costs of occupational accidents and illnesses can be as high as three to four percent of a country's gross national product. In reality, no one really knows the total costs of workrelated accidents or diseases because along with more obvious direct costs, there are a multitude of indirect costs which are difficult to measure.

Health and safety programs

For all of the reasons given above, it is crucial that employers, workers and unions are committed to health and safety and that:

- workplace hazards are controlled at the source whenever possible;
- records of any exposure are maintained so they are available for many years;
- both workers and employers are informed about health and safety risks in the workplace;
- there is an active and effective health and safety committee that includes both workers and management;
- worker health and safety efforts are ongoing.

Effective workplace health and safety programs can help to save the lives of workers by reducing hazards and their consequences. Health and safety programs also have positive effects on both worker morale and productivity, which are important benefits. At the same time, effective programs can save employers a great deal of money.



- 1. Occupational health and safety encompasses the social, mental and physical well-being of workers in all occupations.
- 2. Poor working conditions have the potential to affect a worker's health and safety.
- 3. Unhealthy or unsafe working conditions can be found anywhere, whether the workplace is indoors or outdoors.
- 4. Poor working conditions can affect the environment workers live in. This means that workers, their families, other people in the community, and the physical environment around the workplace can all be at risk from exposure to workplace hazards.
- 5. Employers have a moral and legal responsibility to protect workers.
- 6. Work-related accidents and diseases are common in all parts of the world and often have many direct and indirect negative consequences for workers and their families. A single accident or illness can mean enormous financial loss to both workers and employers.
- Effective workplace health and safety programs can help to save the lives of workers by reducing hazards and their consequences.
 Effective programs can also have positive effects on both worker morale and productivity, and can save employers a great deal of money.