

Occupational Safety and Health

ENG101 Engineering Professionalism

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Occupational Safety and Health (OSH)

The science of the anticipation, recognition, evaluation and control of hazards arising in or from the workplace that could impair the health and well-being of workers, considering the possible impact on the surrounding communities and the general environment.

A key element in achieving sustained decent working conditions and strong preventive safety cultures – SDG 8

About 80 percent of all ILO standards and instruments are wholly/partly concerned with OSH

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ILO Statistics and Estimates

2.3 million women and men suffer work-related accidents or diseases (over 6000 deaths every day)

340 million occupational accidents; 60 million victims of work-related illnesses

Work-related diseases cause the most deaths among workers; hazardous substances cause 651,279 deaths

Highest rate of recorded accidents in the construction industry

Younger and older workers are more vulnerable

Increasing number of older persons working in developed countries need special consideration – superaging

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OSH Issues

High economic costs at enterprise, national and global levels: compensation, lost working time, interruption of production, training, medical expenses

Accidents are caused by preventable factors: known and available measures and methods to avoid industrial and occupational accidents

Performance Variations: countries, economic sectors, enterprise size

Groups at particular risk: male-dominated OSH, home-based workers, part-time workers, migrants, informal workers, child labour, ageing workers, contract workers, working drivers

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Variations in OSH Performance

Countries: a factory worker in Pakistan is eight times more likely to be killed at work than a factory worker in France;

Economic Sectors: the highest rates of occupational deaths occur in agriculture, forestry, mining and construction.

Size of Enterprises: the rate of fatal and serious injuries in small workplaces (defined as those with fewer than 50 employees) is twice that in large workplaces (defined as those with more than 200 employees)

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OSH Instruments – ILO

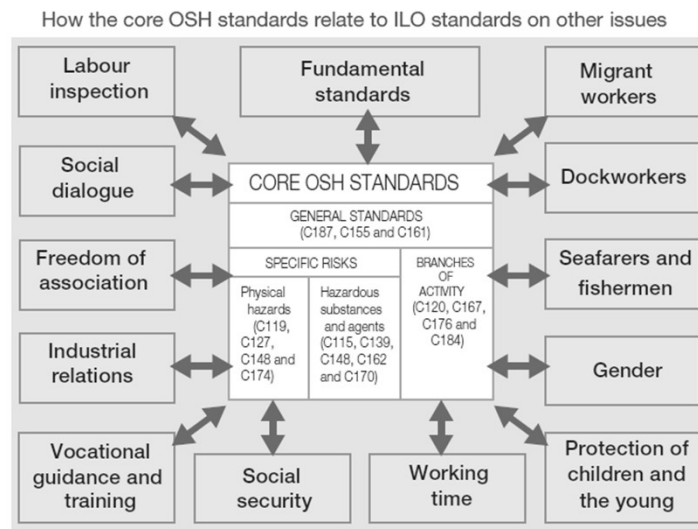
International Labour Standards: standards for labour and social matters

International Labour Code: minimum standards in social and labour field

Codes of Practice: practical recommendations, often technical

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Core OSH Standards and Other ILO Standards



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Key Principles

- All workers have rights
- OSH policies must be established
- National OSH system must be established
- National OSH programme must be formulated
- Social partners and other stakeholders must be consulted
- OSH programmes must aim at both prevention and protection
- Continuous improvement of OSH must be promoted
- Information is vital for the development and implementation of effective programmes and policies

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Key Principles

Health promotion is a central element of occupational health practice

Occupational health services covering all workers should be established

Compensation, rehabilitation and curative services must be made available to workers who suffer occupational injuries, accidents and work-related diseases

Education and training are vital components of safe, healthy working environments

Workers, employers and competent authorities have certain responsibilities, duties and obligations

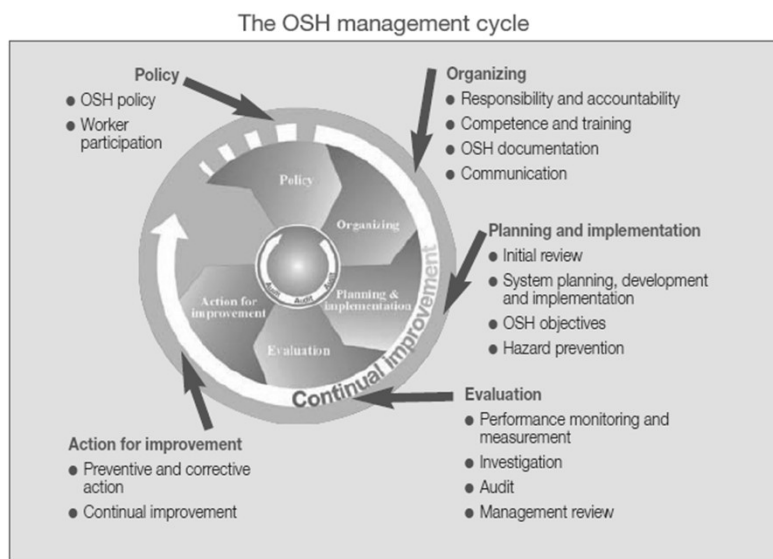
Policies must be enforced

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National OSH Model

According to ILO standards and practices

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OSH Management Cycle

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Engineering Control and Housekeeping

Built-in protection as part of the work process

Use of a machine to do dangerous work

Technical measures to control the hazard or risk by changing the process, so that the job is done in a completely different and safer way, or by enclosing the process completely to keep the hazard from reaching the worker

Strict housekeeping, vacuuming, regular and thorough maintenance

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OSH in Pakistan

OSH at work in Pakistan

Pakistan OSH profile

Pakistan Occupation Health and Safety Act 2018

Punjab Employees Social Security Institution

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References

1. O. Alli, B. (2008). *Fundamental Principles Of Occupational Health And Safety* (Second Edition). International Labour Organization.

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