

PSYCHOSOCIAL HAZARDS

- Can arise out of the many different ways that people interact with each other.
- It can be due to stress outside or inside the workplace, the type of work being done or because of the attitudes and behaviours that different people bring to their jobs.
- Psychosocial hazards have the potential to harm our physical and mental health and safety, and the health and safety of the workplace.
- Arise from the workers' failure to adapt to an alien psychosocial environment.
- Frustrations, lack of job satisfaction, insecurity, poor human relationships, and emotional tension are some of the psychosocial factors, which may undermine both physical and mental health of the workers.

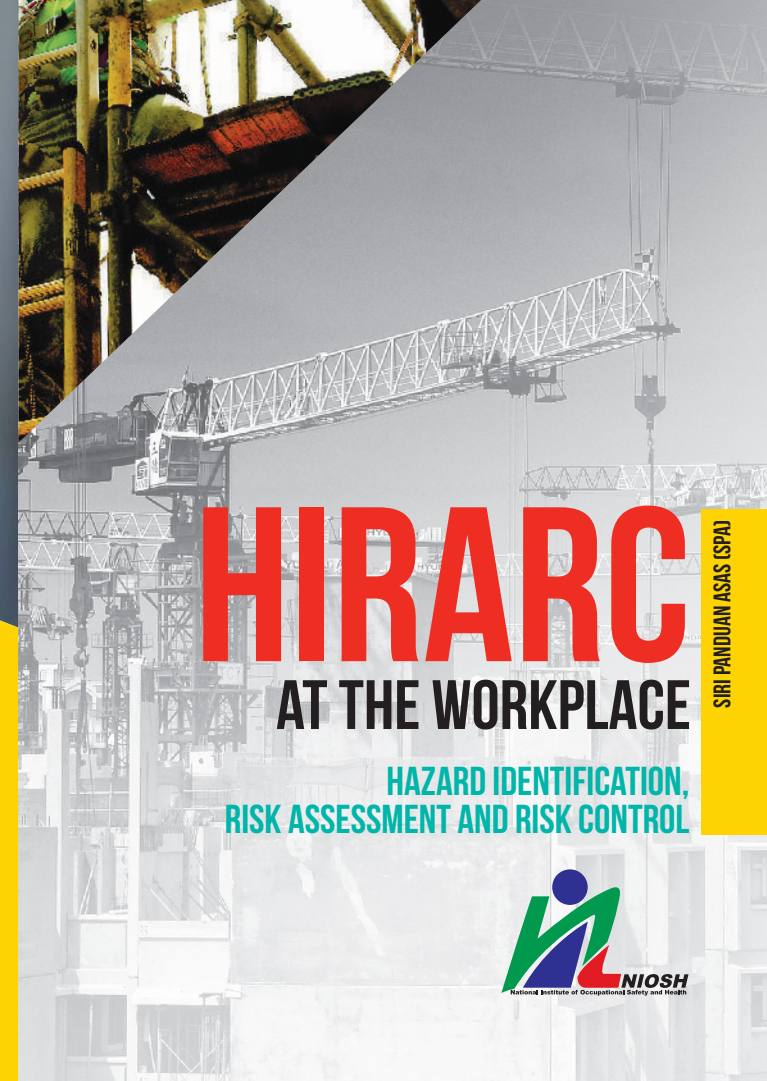
Examples of Psychosocial Hazards:

- Organization's restructuring
- Sexual harassment
- Poor income
- Bullying
- Work overload



BIOLOGICAL HAZARDS

- Biological hazards are organic substances that pose a threat to the health of humans and other living organisms.
- Biological hazards include pathogenic micro-organisms, viruses, toxins (from biological sources), spores, fungi and bio-active substances.
- Biological hazards can also be considered to include biological vectors or transmitters of disease.
- Unprotected exposure to biological hazards can result in a range of infections and illnesses.
- The harmful effects posed to human health by these biological hazards are mainly of three types: infections, allergy and poisoning.



HIRARC

AT THE WORKPLACE

HAZARD IDENTIFICATION,
RISK ASSESSMENT AND RISK CONTROL

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INTRODUCTION



HI Hazard Identification

The identification of undesired event that lead to the materialization of the hazard and the mechanism by which those undesired event could occur.

RA Risk Assessment

The Process of evaluating the risk to safety and health arising from hazards at work.

RC Risk Control

The methods used to reduce the amount of inherent risk or to manage a risk.



HAZARD CLASSIFICATION

PHYSICAL HAZARDS

- Physical hazards are things or agents that may come into contact with the body with potential for harm.
- Many physical hazards are things that can be seen, like a slippery work surface, a loose railing on a scaffold, or a missing guard on a meat slicer.
- Other physical hazards are referred to as ‘physical agents’.
- These are sources of energy that can’t always be seen, but still have potential to harm the body.
- Physical agents include things like noise, vibration, radiation, temperature and pressure.

Examples of physical hazards

- Protruding objects
- Mechanical hazards
- Exposure to radiation, extremely hot or cold surfaces / substances
- Slippery surfaces
- Inappropriate or damaged tools
- Exposed to electrical sources
- Pressured environment



CHEMICAL HAZARDS

Chemical is an element or mixture of elements or synthetic substances (liquids, gases, vapors, solids or particulates) that are considered harmful. The potential harm is based on the duration of exposure, the quantum of exposure, individual susceptibility and route of exposure. Chemicals have symbols to show their own possible hazards. Chemicals hazardous to health mean any chemical or preparation which:

- is listed in Schedule I or II;
- possesses any of the properties categorized in Part B of Schedule I of the OSHA (CPL) Reg. 1997
- comes within the definition of “pesticide” under the Pesticides Act 1974 [Act 149]
- is listed in the First Schedule of the Environmental Quality (Schedule Wastes) Reg. 1989

CHEMICAL HAZARD CHARACTERISTICS

Chemical incompatibilities

Occur when hazardous materials are inadvertently combined, producing substances that are more toxic than the original hazardous materials

Reactive / unstable chemical

Are substances that produce or release energy in the form of heat or an explosion when under pressure, exposed to light, or subjected to friction or ignition.



ERGONOMIC HAZARDS

- The study of work and the relationship of work to the physical and cognitive capabilities of people.
- Fitting the job (tools, tasks, and environment) to the employee, instead of forcing the worker to fit the job.

ERGONOMICS RISK FACTORS (ERF)

Ergonomic Risk Factors (ERF) are the aspects of a job or task that impose a biomechanical stress on the worker. Ergonomic risk factors are the synergistic elements of MSD hazards.

ERGONOMICS ASSESSMENTS

Ergonomics problems in the workplace can be assessed through various type of assessment. Figure 18 illustrates some of the examples of ergonomics assessment at the workplace.

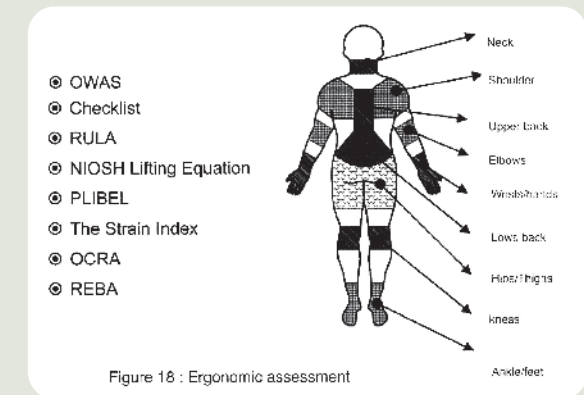


Figure 18 : Ergonomic assessment

Working with uncomfortable environment may lead to body discomfort. One of the most common issues in ergonomics is musculoskeletal disorders (MSDs). These may affect muscles, tendons, joint, nerves and related soft tissues anywhere in the body.