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 workers in an occupational environment adapted to his physiological and psychological equipment.

(WHO, 1951)
OCCUPATIONAL HEALTH AND RELATED LAW
ACT IN MALAYSIA

- AKTA KILANG DAN JENTERA 1967:
  LEAD (TIMAH HITAM)
  MINERAL DUST
  ASBESTOS
  NOISE REGULATION

- AKTA KESELAMATAN DAN KESIHATAN PEKERJAAN:
  Occupational Safety and Health ACT 1994

An Act to make further provisions for securing the safety, health and welfare of persons at work, for protecting others against risks to safety or health in connection with the activities of persons at work, to establish the National Council for Occupational Safety and Health and for matters connected therewith.
OCCUPATIONAL HEALTH HAZARDS
CLASSIFICATION OF HEALTH HAZARDS

- Acute Hazards
  - Faster to detect their effect.
  - Easier to identify and access their risk factors.
  - Hazards easier to see and detect.
  - Hazards in terms of “structural faults” (slippery stairs, hole floor).
  - Involve chemical (i.e., highly in flammable, toxic or poisonous, irritating or harmful, explosive, radioactive, corrosive)
CLASSIFICATION OF HEALTH HAZARDS

- Chronic Hazards
  ☑ long time to detect their effect.
  ☑ Difficult to identify and access their risk factors. Need help from expert person.
  ☑ Hazards difficult to see and detect.
  ☑ Hazard from chemical, noise, vibration, temperature, agronomic, work stress.
GROUPS OF HEALTH HAZARD

- PHYSICAL
- CHEMICAL
- BIOLOGICAL
- ERGONOMICS
- PSYCHOSOCIAL
HAZARD

EXPORURE

RISK

OCCUPATIONAL DISEASES
WORK AND ENVIRONMENT

DISEASES

SEVERE
PHYSICAL HAZARDS

*NOISE
*HOT/COLD TEMPERATURE
*VIBRATION
*RADIATION
*AFFECT OF ENVIRONMENT
CHEMICAL HAZARDS RELATED TO HEALTH (i.e. Mercury, phosphorus, bromium, ammonia)
Ergonomics is the science of designing the job, equipment, and workplace to fit the worker. Proper ergonomic design is necessary to prevent repetitive strain injuries, which can develop over time and can lead to long-term disability.
HAZARD PSYCHOSOCIAL

- JOB STRESS
- SHIFT WORK
- OVERLOAD WORKS
- FIERCE BOS
- EMPLOYEE PROBLEMS
GROUPS OF SAFETY HAZARD

- **Mechanical/Machine** – smashed, knocked, cut and involvement with equipments / machines that would cause injuries to the workers.

- **Height/Gravity** – Caused fallen objects or human falling from high places.

- **Electrical** – Electric shock or fire due to short circuits and result of flowing electricity.
GROUPS OF SAFETY HAZARD

- **Fire/Explosion** – Can cause burnt, injuries and deaths.

- **Poison in Confined Spaces** – Lack of air and oxygen due to confine spaces and would result losses for the workers.
SCOPE OF HEALTH AND OCCUPATIONAL HEALTH
Audiometer System
Audiobooth
MONITORING ENVIRONMENT AND BIOLOGY
PREVENTION
Complete Enclosure
Partial Enclosure
Example

The exhaust air from a compressed air-driven grinding machine produces a loud noise. The air becomes turbulent while leaving the machine through the side handle.

Control measure

A new handle is developed, filled with a porous sound-absorbing material between two fine-meshed gauzes. Passage through the porous materials breaks up the turbulence. The air stream leaving the handle is less disturbed, and the exhaust noise is weaker. A straight-lined duct-type muffler may also be used.
ADMINISTRATIVE CONTROL
LIKE TRAINING
PPE (PERSONAL PROTECTIVE EQUIPMENT)

Coveralls

Full Body Suit
THANK YOU