

- ✓ Adequate fire extinguishers and alarms, training in fire procedures and designated emergency assembly points
- ❖ General environmental conditions:
 - ✓ Good ventilation, adequate illumination and comfortable temperature
- ❖ Noise control
 - ✓ Enclose noisy machines, maintain machines regularly and provide hearing protectors
- ❖ Proper guarding of machines to prevent cuts, lacerations and crush injuries
- ❖ Careful maintenance of the earthing arrangement of electrical tools
- ❖ Ergonomics
 - ✓ Ergonomically designed machines and power tools
 - ✓ Proper manual handling/correct lifting techniques
- ❖ Have adequate rest breaks
- ❖ Provision of adequate and appropriate safety signs e.g. NO SMOKING, WEAR SAFETY HELMETS
- ❖ Provision of appropriate personal protective equipment e.g. steel cap safety shoes, helmets, safety harnesses and fall restraining equipment
- ❖ Good housekeeping helps to prevent accidents of the type caused by blocked passageways,

protruding nails, fires, slips and trips and infestation by rodents

- ❖ Learn first aid and ensure first aid boxes are available
- ❖ Follow safety procedures for:
 - ✓ Working at heights
 - ✓ Electrical safety
 - ✓ Machinery
 - ✓ Ladders
 - ✓ Confined space
 - ✓ Working alone
 - ✓ Working with chemicals
 - ✓ Scaffolding
 - ✓ Demolition works
- ❖ Adequate washing and sanitary facilities
- ❖ Adequate and sanitary workers accommodation
- ❖ Appropriate vaccinations
- ❖ Personnel, time and equipment should be allotted for periodical checks of the state of construction site, machinery, storage premises and personal protective equipment
- ❖ Report all accidents and injuries



**OCCUPATIONAL HEALTH DIVISION
DEPARTMENT OF HEALTH SERVICES**

WORKING IN CONSTRUCTION



*FACTS ON THE HEALTH
AND SAFETY RISKS*

1. INTRODUCTION

- ❖ Working in construction requires working at ever changing locations and work environments
- ❖ The main duties includes:
 - Build and install various commercial, industrial or residential complexes and systems
 - Use, clean and maintain various types of equipment
 - Supervise or apprentice other workers

2. HEALTH AND SAFETY HAZARDS

❖ Physical Hazards

- Noise from machines, tools and vehicles e.g. pylon drivers - can cause hearing loss which is permanent and has no cure
- Heat stress and heat exhaustion from prolonged exposure to heat and humidity especially when working during midday and early afternoon
- Dust-wood dust, cement, silica (from sandblasting)

❖ Biological hazards

- Exposure to moulds, fungi and bird or rodent droppings
- Animal bites e.g. snakes, dogs, bees

❖ Chemical Hazards

- Exposure to various chemicals such as lead, asbestos, paints, solvents which can give rise to multiple health problems e.g. respiratory disease from wood dust, skin disease from cement
- Working in confined space (e.g. exposure to toxic gases in sewers or combustion products in confined operation of diesel engine)

❖ Ergonomic Hazards

- Improper or poor manual handling techniques or awkward postures
- Working with hand tools, powered tools and heavy powered equipment can lead to musculoskeletal problems such as upper limb disorders and back problems e.g. strains, sprains, pain, numbness, in the hands and wrists

❖ Psychosocial Hazards

- Shiftwork and extended days
- Stress and fatigue
- Fear of heights

❖ Safety Hazards

- Cuts and lacerations - from nails, tin roofings, broken glass etc

- Electrical shocks e.g. from inadequate insulation or earthing of machineries
- Injuries due to slips, trips and falls e.g. working at a height with no guard rails or from collapsing structures
- Crush injuries from trapped fingers/limbs in moving machinery or from heavy, blunt objects if dropped on the worker's foot or other bodily injuries e.g. eye from flying particles
- Fire hazard
 - Flammable materials e.g. timber, welding gases, solvents, diesel oil for machines

3. OTHER HEALTH RISKS

- ❖ Warm and humid working environment and overcrowding in the accommodation quarters can cause unduly high incidence of infectious disease and general ill health
- ❖ Skin cancer from exposure to sunlight

4. PREVENTION AND CONTROL

- ❖ Needs to have adequate vocational training and be familiar with the basic principles of safety and hygiene
- ❖ Fire Prevention