

1. INTRODUCTION

- ❖ Working in the education sector can have the same hazards as any other workplace; however, this is shared with students who may be young, vulnerable, inexperienced, ignorant and be a hazard in themselves
- ❖ Activities may range from:
 - Lecturing/teaching
 - Laboratory work
 - Vocational training and handicrafts
 - Workshop work (technical schools)
 - Childminding work in nurseries/kindergardens
 - Physical education activities

2. HEALTH AND SAFETY HAZARDS

❖ Physical Hazards

- Eyestrain from work with optical microscopes, working in dark rooms or computer use
- Vocal strain from prolonged speaking
- Burns from contact with hot surfaces e.g. flame burners in laboratories
- Heat stress and exhaustion during physical education activities
- In technical workshops, exposure to noise from machines and ultraviolet and infrared radiation from welding

❖ Biological hazards

- Exposure to wide variety of biological agents especially in laboratory work e.g. animal bites or accidental injection

❖ Chemical Hazards

- Chemicals which are corrosive, irritating, toxic, asphyxiating, allergenic, radioactive or carcinogenic especially when working in laboratories or workshops-can cause a wide range of health problems ranging from:
 - acute disorders such as eye irritation, headaches, nausea and breathing problems from toxic gases and fumes e.g. formaldehyde
 - chronic effects such as cancers, skin disorders and chronic chemical poisoning

❖ Ergonomic Hazards

- Acute injuries-intervetebreal disc rupture from e.g. lifting heavy young children
- Back and neck problems due to poor lifting techniques or awkward body positions
- Prolonged standing can cause varicose veins of the leg and backache
- Cumulative trauma disorders due to repetitive work (e.g. typing) and prolonged sitting which can give rise to discomfort, numbness and ache in hands and arms

❖ Psychosocial Hazards

- Psychological stress when working under time pressure
- Violence from pupils/parents especially when working alone or working with pupils with special needs

❖ Safety Hazards

- Risk of injury due to:
 - Slips and trips from e.g. wet floors or obstructed passage
 - Electrical shocks from poorly insulated instruments
 - Cuts and lacerations due to stepping on, struck by or striking against sharp or broken tools or objects
 - Entanglement of hair, clothes or fingers in rotating and moving equipment e.g. centrifuge
 - Crush injuries e.g. fall of heavy books on toes
 - Chemical burns from hot or corrosive fluids
 - Other bodily injuries e.g. eye from flying objects during grinding in workshops
- Fires and explosions of spilled or leaked flammable / explosive substances or chemicals from laboratories, workshops or canteen kitchens

3. PREVENTION AND CONTROL

❖ General teaching environmental conditions:

- ✓ Ensure adequate ventilation to reduce heat stress as well as odors, gases and vapors especially in laboratories
- ✓ Adequate illumination and comfortable temperature
- ✓ Floors constructed of non-slip material
- ✓ Ensure regular maintenance of premises especially hallways and stairways

❖ Ergonomics

- ✓ Ergonomically designed workstation
- ✓ Use ergonomically designed machines and power tools in technical workshops
- ✓ Learn proper manual handling/correct lifting techniques

❖ In laboratories or workshops:

- ✓ Ensure adequate noise control by enclosing noisy machines, maintain machines regularly and provision hearing protectors
- ✓ Protect skin of hands with chemical-resistant gloves; if impractical use a barrier cream
- ✓ Do not use solvents to remove grease-use a water based cleanser instead
- ✓ Do not wear loose hair or clothing - this prevent entanglement in moving machinery

❖ Wear appropriate personal protective equipment e.g. eye and hand protection when in laboratories or workshops

❖ Provision of adequate and appropriate safety signs e.g. NO SMOKING

❖ Electrical safety:

- ✓ Careful maintenance of the earthing/grounding arrangement of equipments
- ✓ No overloading of electrical sockets

❖ Fire Prevention

- ✓ Adequate fire extinguishers and alarms, training in fire procedures and designated emergency assembly points

❖ Good housekeeping helps to prevent accidents such as slips and trips caused by blocked passageways

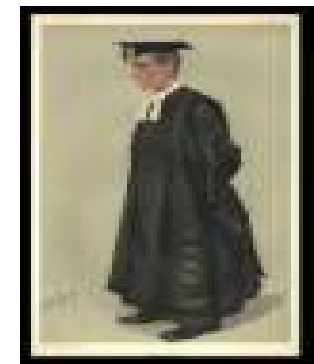
❖ Learn first aid and ensure first aid boxes are available

❖ Appropriate vaccinations e.g. hepatitis B, varicella and tetanus



**OCCUPATIONAL HEALTH DIVISION
DEPARTMENT OF HEALTH SERVICES**

WORKING IN THE EDUCATION SECTOR



***FACTS ON THE HEALTH
AND SAFETY RISKS***