

Primary Health Care Initiatives (PHCI) Project  
Contract No. 278-C-00-99-00059-00  
Abt. Associates Inc.

## **OCCUPATIONAL HEALTH**

### **LEARNING OBJECTIVES**

- Understand the relationship between occupational hazards and risk of disease or injury.
- List potential health effects of chemical, physical, biological, mechanical and psychosocial hazards.
- Understand the main health problems associated with the employment of women and other vulnerable groups.
- Outline various approaches to the prevention and control of occupational health problems.

### **TEACHING STRATEGIES**

- Lecture
- Discussion
- Case Studies

### **MATERIALS AND EQUIPMENTS NEEDED**

- Overhead projector
- Flip charts and markers

### **LEARNING POINTS**

- Occupational health – Safe and healthful employment and places of employment.
- Occupational disease – Disease caused by or resulting from employment
- Primary occupational diseases
  - Respiratory diseases – bronchitis, pneumoconiosis (asbestosis, silicosis).
  - Dermatitis – allergic, contact.
  - Cancers – chemical exposure, association with smoking.
  - Poisoning
  - Musculoskeletal diseases – repetitive motion disorder
  - Reproductive diseases – male and female infertility.
  - Psychological stresses – anxiety, depression, interpersonal conflicts
  - Hearing loss – from constant or repetitive loud noise.
  - Eye disorders – conjunctivitis, cataracts.
  - Infectious diseases – needle sticks, inhalation, close proximity to ill co-workers
- Occupational accidents

- Types and causes – Examples
  - Falls – From heights, on stairs, or slipping on slippery substances.
  - Machinery – Body parts or clothing becoming entangled.
  - Eye injuries from flying debris from grinding
  - Automobiles – Importance of safe driving of company vehicles, preventive maintenance.
- Consequences of occupational accidents
  - Disability (temporary and permanent) – significant financial and emotional loss for family and community
  - Death – loss of significant income and protection
- Methods of prevention and control
  - Survey of workplace and identification of potential risks and hazards
    - Unprotected machinery and equipment
    - Hazardous chemicals, fumes, smoke, dust
    - Unsafe storage practices
    - Ergonomic risks (unnatural strain on reaching, or repetitive activities)
    - Overcrowding, poor ventilation and light
    - Accessible area for break, and adequate restrooms
  - Education of workers and supervisors regarding safe practices, reduction of hazards and risks
  - Protection - examples
    - Safety guards on exposed belts, machinery, etc.
    - Hearing protection (ear plugs) in high noise environments
    - Eye protection (safety glasses) when grinding or working with high speed machinery
    - Ventilation hoods over toxic chemicals or paints
    - Cleaning of spills on floor immediately
    - Safety rails on stairs
    - Respirators in dusty or contaminated environments
    - Protective clothing when using chemical sprays (insecticides, etc.)
  - Alteration of work environment
    - Adjustable table and chair heights to prevent repetitive tendon strain
    - Ramps to avoid hazards of stairs
    - Sound insulation around high noise environments
    - Use of lifts and machinery to lift heavy items
  - Reporting of significant risks to appropriate civil and health authorities

### 1. Group exercise

Identify some known occupational hazards and risks in your Governorate. What can you do, as a health care provider, to help prevent disease or injury that may result from those hazards?

### 2. Group exercise

You have noticed that many men and women who come to your health center, and who work in a local factory, suffer from hearing loss. What can you do, as a health care provider, to investigate the possible causes of the hearing loss.

Depending on what you find, what might be done to prevent hearing loss in the future?

**CRITICAL ELEMENTS OF COMPETENCE FOR EVALUATION**

- Correct identification of occupational health problems
- Appropriate management of common occupational health problems
- Appropriate patient and employer education for prevention of occupational health problems