



## **Module 4: Management of IPC Programs**

### **Session2: Occupational Health and safety**



# Session Objectives

- Introduction to OSH
- Importance of OSH
- Workplace Hazards
- Role of Health Care Worker, Employer and Management
- Zero Accident at Workplace
- Risk Reduction Strategies
- Documentation and Reporting



# Introduction

Occupational health is the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations by preventing departures from health, controlling risks and the adaptation of work to people, and people to their jobs

International Labor Organization  
(ILO)  
World Health Organization (WHO)

**Occupational safety and health(OSH)** is a **multidisciplinary** field concerned with:

- **Safety**,
- **Health**,
- **Welfare**

of people at **work**.



## Importance of OSH

- Ensures safety at work place
- Reduction of morbidity and mortality related to work activities
- Reduces disability adjusted life years(DALYs)
- Reduces litigations
- Improves work productivity
- Saves employers from unnecessary compensations



# Basic OSH concepts

- **Hazard:**
  - source, situation, or act with a potential for harm in terms of human injury or ill health, or a combination of these
- **Risk**
  - Combination of the likelihood of an occurrence of a hazardous event
- **Risk assessment**
  - Process of evaluating risks to workers' safety and health from workplace hazards
- **Health**
  - Relation to work, indicates not merely the absence of disease or infirmity



# Basic OSH concepts contd

- **Occupational disease**

- disease contracted as a result of an exposure over a period of time to risk factors

- **Work accident**

- discrete occurrence in the course of work

- **Prevention**

- all the steps or measures taken or planned at all stages of work in the undertaking to prevent or reduce occupational risks



# Principles of Zero accidents at the workplace

There should be no accidents at the workplace however accidents do happen, how then can we reduce incidents of accidents?

- Use the Pointing and calling out method
- The Buddy system
- Institute Occupational and safety management systems
- Conducting regular and consistent risk assessment at workplace

VIDEO; <https://www.youtube.com/watch?v=ZJXeprcfMeM>



# Hazards at workplace

- **Physical:**
  - Environmental factors that can harm an employee without necessarily touching them, including heights, noise, radiation and pressure.
- **Biological:**
  - Include viruses, bacteria, insects, animals
- **Chemical:**
  - Chemical substances that can cause harm resulting in skin irritation, respiratory system irritation, blindness, corrosion and explosions.
- **Mechanical:**
  - Create unsafe working conditions e.g exposed electrical wires





# Hazards at workplace cont..

- **Psychosocial:**

- Affect employee's mental health or wellbeing. For example, sexual harassment, victimization, stress and workplace violence.

- **Ergonomic:**

- Result of physical factors that can result in musculoskeletal injuries. For example, a poor workstation setup in an office, poor posture and manual handling.



# Hazard control measures

- **Elimination :**
  - Removal of the danger through changing a work process in a way that will get rid of a hazard
- **Substitution:**
  - Replacing a hazardous substance with a nonhazardous or less hazardous.
- **Engineering Controls:**
  - Process of keeping the hazard away from the worker e.g, barriers, ventilation
- **Administrative controls**
  - Policies, guidelines and measures instituted by the employer that ensure safety at the workplace
- **PPE**
  - specialized clothing or other wearable gear that minimizes one's exposure to sources of illness or injury

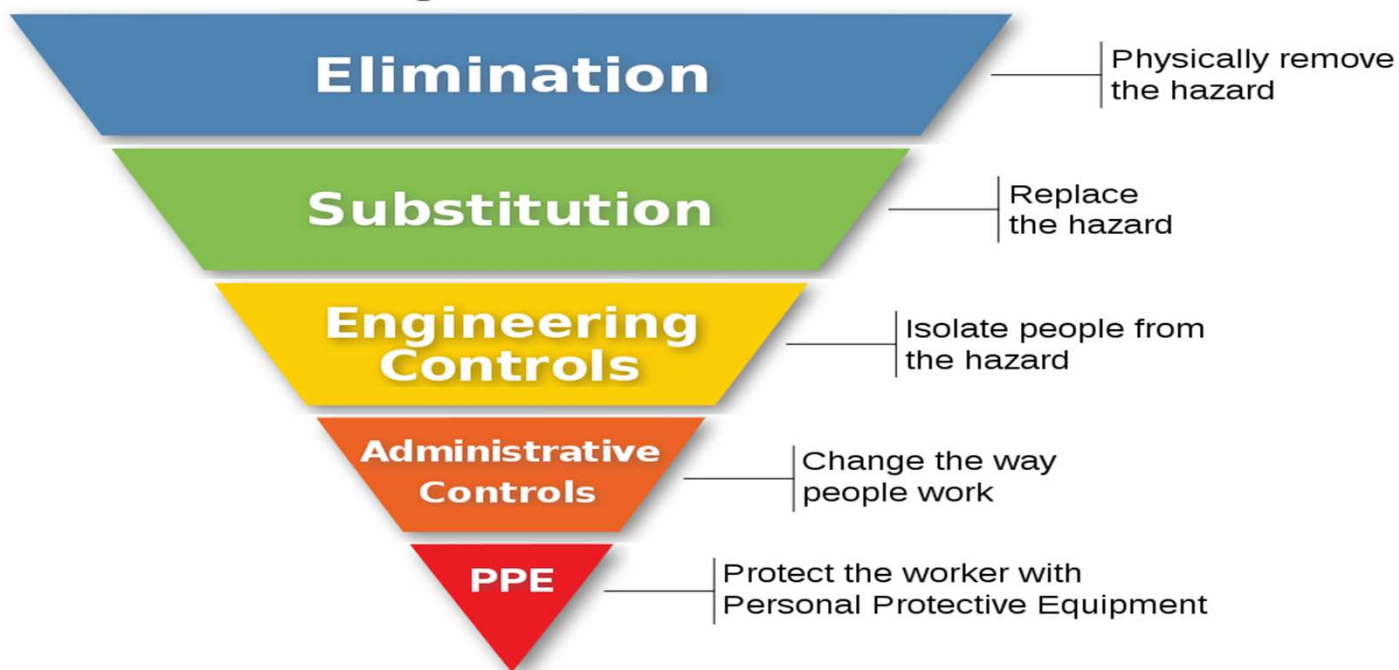


Most  
effective



Least  
effective

# Hierarchy of Controls





# Risk reduction in the workplace

- Risk identification
- Risk Categorization
- Risk reduction
- Involve employees in making OSH decisions



# Overview

- Health workers face a range of occupational risks associated with:
  - Infections,
  - Unsafe patient handling,
  - Hazardous chemicals,
  - Radiation,
  - Heat and noise,
  - Psychosocial hazards,
  - Violence and harassment,
  - Injuries,
  - Inadequate provision of safe water, sanitation and hygiene.





## Below are the most common IPC related occupational hazards in the health sector

### Occupational infection



The most common occupational infections of concern in the health sector are tuberculosis, hepatitis B and C, HIV/AIDS and respiratory infections (coronaviruses, TB, influenza).

### Exposure to hazardous chemicals



The most common hazardous chemicals in the health sector include cleaning and disinfecting agents, sterilants, mercury, toxic drugs, pesticides, latex and laboratory chemicals and reagents.



# Occupational infections



- **Needle stick injuries contribute to 39%, 37% and 4.4% of hepatitis C, hepatitis B and HIV infections respectively**
- **The prevalence of acute hepatitis B infection among health workers globally is 5.3%**
- **About 54% of health workers in low- and middle-income countries have latent TB infection**





# Blood borne Infectious Diseases: HIV/AIDS, Hepatitis B, Hepatitis C

- Exposures to blood and other body fluids occur across a wide variety of occupations.
- Health care workers, and other workers can be exposed to HAI
- The pathogens of primary concern are the human immunodeficiency virus (HIV), hepatitis B virus (HBV), and hepatitis C virus (HCV).
- Workers and employers should take advantage of available engineering controls and work practices to prevent exposure to blood and other body fluids.

## How does it get in?

- Mucous membranes—  
The infected blood could enter your body's bloodstream through a mucous membrane.







# Infection-Control Measures

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## 1. Administrative controls

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## 2. Environmental controls

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## 3. Use of personal protective equipment

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Infection control program should be based on a three-level



# Administrative Measures

Develop and maintain infection prevention and occupational health programs.

Provide supplies necessary for adherence to Standard Precautions (e.g., hand hygiene products, safer devices to reduce percutaneous injuries, personal protective equipment).

Assign at least one individual trained in infection prevention responsibility for coordinating the program in each service.

Develop and maintain written infection prevention policies and procedures appropriate for the services provided by the facility and based on evidence-based guidelines, regulations, or standards.

Facility has system for early detection and management of potentially infectious persons at initial points of patient encounter.



## Workplace safety - infection control

- Infection control in the workplace aims to prevent pathogens being passed from one person to another.
- The foundation of good infection control is to assume that everyone is potentially infectious.
- Basic infection control procedures include hand washing and keeping the workplace clean.





## Workplace infection control – personal hygiene practices

Infection control procedures relating to good personal hygiene include:

- hand washing
- unbroken skin gloves
- personal items





## Food preparation and workplace infection control

When preparing food:

- Wash your hands before and after handling food.
- Avoid touching your hair, nose or mouth.
- Keep hot food hot and cold food cold.
- Use separate storage, utensils and preparation surfaces for cooked and uncooked foods.
- Wash all utensils and preparation surfaces thoroughly with hot water and detergent after use.





## Infection control and workplace cleanliness

Infection control procedures relating to cleanliness in the workplace include:

- regularly washing of the floors, bathrooms and surfaces with hot water and detergent
- periodically washing the walls and ceilings
- thoroughly washing and drying mops, brushes and cloths after every use
- using disinfectants to clean up blood and other spills of bodily fluids
- spot cleaning when necessary.





## Dealing with spills of body fluids

Procedure to deal with spills of body fluids in infection control :

- Isolate the area.
- Wear gloves, a plastic apron and eye protection, such as goggles.
- Soak up the fluid with disposable paper towels, or cover the spill with a granular chlorine
- Mix one part bleach to 10 parts water and apply to the area for 10 minutes.
- Wash the area with hot water and detergent.
- Dry the area.
- Dispose of paper toweling and gloves appropriately.
- Wash your hands.







## Infection control – disposing of infectious waste

To dispose of infectious waste that has been contaminated with blood or other body fluids:

- Wear heavy duty gloves.
- Place waste in plastic bags marked 'infectious waste'.
- Dispose of waste in accordance with accordance to standards







# Workplace infection control – handling contaminated sharps

Infection control procedures when handling needles and other sharp contaminated objects include:

- Never attempt to re-cap or bend used needles.
- Handle by the barrel.
- Place in an appropriate puncture-proof container

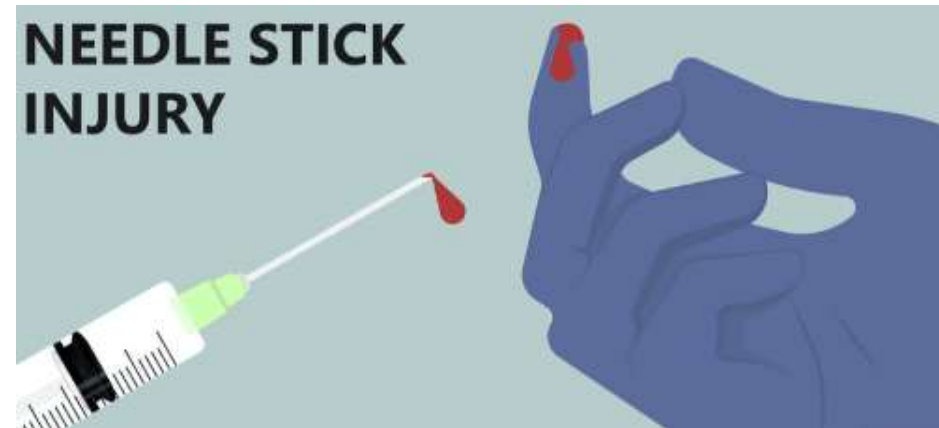




# Infection control – occupational exposure to body fluids

If you come in contact with blood or body fluids:

- Flush the area with running water.
- Wash the area with plenty of warm water and soap.
- Report the incident to the appropriate staff member.
- Record the incident via the Disease/Injury/Near Miss/Accident (DINMA) reporting procedure.
- Seek medical advice.





# **LEGAL ASPECTS OF OSH**



# Duties of the employer

- Provide a workplace free from serious recognized hazards and comply with standards, rules and regulations issued under the OSH Act.
- Examine workplace conditions to make sure they conform to applicable OSHA standards.
- Make sure employees have and use safe tools and equipment and properly maintain this equipment.
- Use color codes, posters, labels or signs to warn employees of potential hazards.
- Employers must provide safety training.



## **Duties of the employer cont'**

- Establish or update operating procedures and communicate them so that employees follow safety and health requirements.
- Provide medical examinations and training when required by OSHA standards.
- Post, at a prominent location within the workplace, the OSHA poster (or the state-plan equivalent) informing employees of their rights and responsibilities.
- Report to the nearest OSHA office all work-related fatalities
- Keep records of work-related injuries and illnesses.



# Duties of the employee

- Ensure his own safety and health and that of other persons who may be affected by his acts or omissions at the workplace;
- Co-operate with his employer or any other person in the discharge of any duty or requirement imposed on the employer or that other person by this Act or any regulation made here under;
- At all times wear or use any protective equipment or clothing provided by the employer for the purpose of preventing risks to his safety and health;



# Duties of the employee

- Comply with the safety and health procedures, requirements and instructions given by a person having authority over him for his own or any other person's safety;
- Report to the supervisor, any situation which he has reason to believe would present a hazard and which he cannot correct;
- Report to his supervisor any accident or injury that arises in the course of or in connection with his work



# Documentation and reporting

Where the employee has had a work related incident or accident the following should be done:

- Report the incident immediately to your supervisor and institute First Aid
- Fill out and sign the accident register(both supervisor and employee supervisor notify the sub-county OSH person within 24 hrs.
- The SC-OSH to report to the directorate of OSH within 48hrs.
- Experts will institute investigations in relation to the accident and compensations where necessary





# Summary

- Establish effective communication between the management and the workers
- Identify occupational hazards and cases of ill health among workers at the workplace and make appropriate recommendations to the occupier
- Compile statistics of accidents, dangerous occurrences and cases of ill-health as primary data for providing remedial measures, plan and allocation of resources



THANK YOU