



**Faculty of Nursing**

**Occupational Safety and Health**

# **Personal Protective Equipment PPE**

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**Course name : Community Health Nursing**

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## Personal Protective Equipment

**Personal protective equipment, commonly referred to as "PPE", is equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses.**

# Hazard Assessment

**The employer must:**

1. Evaluate every job function
2. Determine if hazards are present
3. Check for hazards to all parts of the body
4. Determine appropriate PPE

Common hazards include chemical exposures, falling or dropping objects, particulates, temperature extremes, light radiation, moving equipment and parts, sharp objects, etc.



## Training Requirements

**Employer must train employees in the following areas before issuing them a PPE:**

- When PPE is necessary
- What PPE is necessary
- How to properly don, doff, adjust, and wear PPE
- Limitations of the PPE
- Proper care, maintenance, and disposal of the PPE

## Training Requirements

Employees must demonstrate an understanding of the training and the ability to use PPE properly before being allowed to perform work requiring the use of PPE

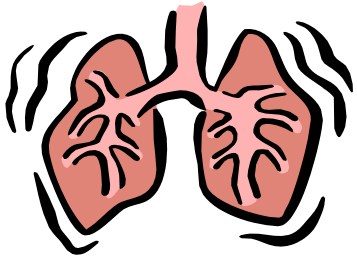
Training should be documented through a written certification to verify that each employee has received and understood the training requirements

## Retraining Requirements

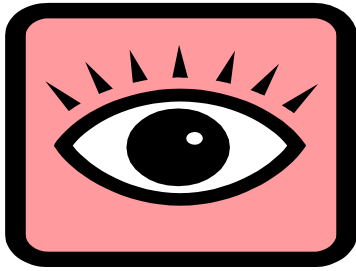
### **Employees shall be retrained due to:**

1. Changes in the workplace
2. Changes in types of PPE used
3. Inadequacies in an affected employee's knowledge
4. Assessment that the use of assigned PPE indicate that the employee has not retained training
5. Or as determined by results of accident investigation

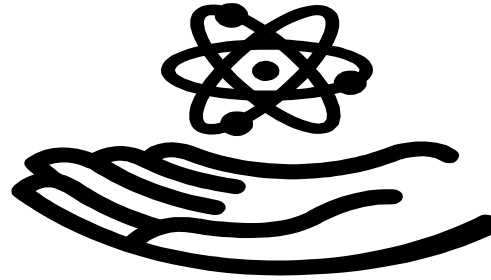
# Routes of entry (or routes of exposure)



**inhalation**



**Eye splash**



**skin**



**ingestion**

**Knowing the hazards and how to protect yourself is the key to your safety!**

# Types of PPE

1. Eye & Face Protection
2. Respiratory Protection
3. Head Protection
4. Foot Protection
5. Hand Protection
6. Hearing Protection
7. Body Protection
8. Fall Protection





# Types of PPE

## 1. Eye and Face Protection

There are four primary types of eye protection

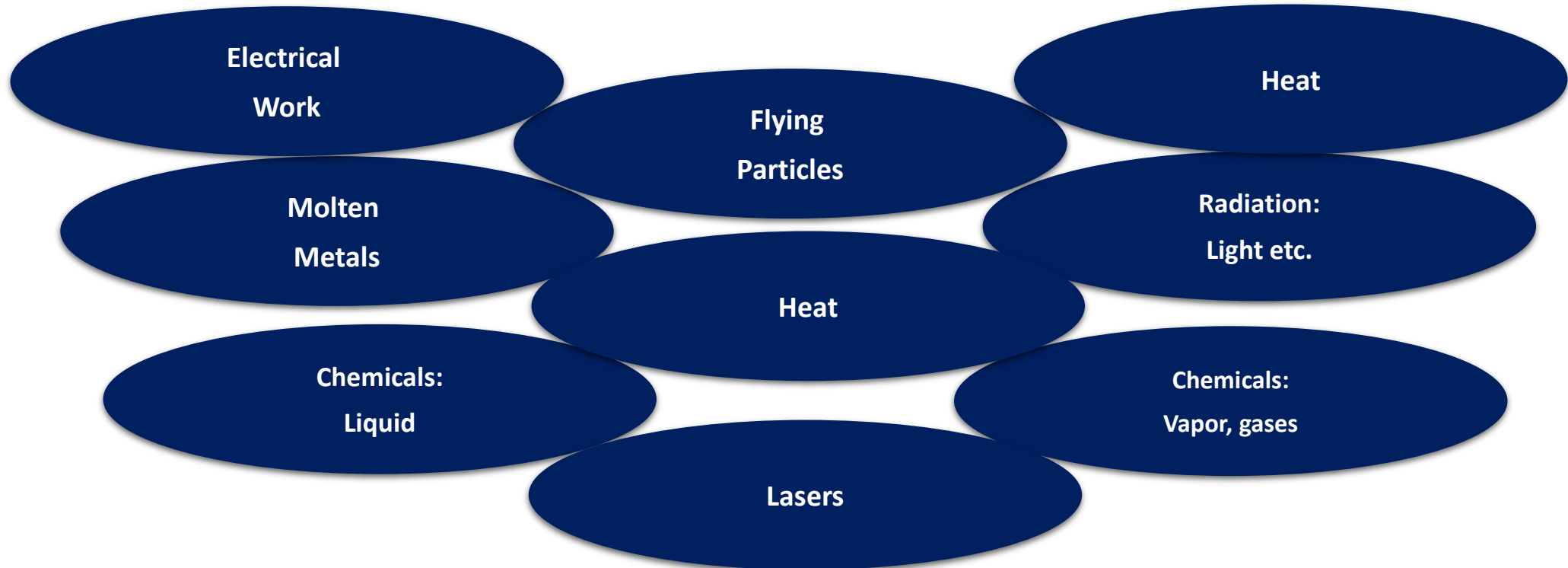
1. **general safety glasses**
2. **laser safety glasses**
3. **chemical splash goggles**
4. **impact goggles.**

**Full face protection is achieved by wearing face shields.**

# Types of PPE

## 1. Eye and Face Protection

Required for exposure to eye and face hazards such as:



# Types of PPE

## 2. Respiratory Protection

Respiratory Protective Equipment (RPE) is a particular type of Personal Protective Equipment (PPE), used to protect the individual wearer against the inhalation of hazardous substances in the workplace air.



## Types of PPE

**When the use of respirators are required, the following elements shall apply:**

- Training
- Fit testing
- Medical evaluations
- Care and maintenance
- Procedures for respirator selection
- Procedures for routine & emergency use

# Types of PPE

## Protection

**Required when employees are in areas where there is a potential for injury to the head from:**

- Falling objects
- Flying objects
- Fixed object
- Protruding material
- High voltage equipment and work involving



# Types of PPE

## 4. Foot Protection

Required when employees are in areas where there is danger of foot injury due to

- falling and rolling objects
- slip hazards or objects piercing the sole, and
- where employees are exposed to electrical hazards



**Must comply with ASTM F2413  
– 05**

# Types of PPE

## 4. Foot Protection

### Potential Hazards



Impact Injuries



Spills & Splashes



Compression Injuries



Electrical Shocks



Slipping



Heat/Cold

## Types of PPE

### 5. Hand Protection

**Required when employees' hands are exposed to hazards such as**

- Skin absorption of harmful substances
- Severe cuts or lacerations
- Punctures
- Chemical burns
- Thermal burns
- Harmful temperature extremes

***Protection must be compatible with hazard!***



# Common Types of Gloves



## Types of PPE

### 6. Hearing Protection

Hearing protectors are required to prevent noise induced hearing loss. Hearing protection devices reduce the noise energy reaching and causing damage to the inner ear. Ear muffs and earplugs are the most common types of PPE.

# Types of Hearing Protection

**There are three types of hearing protection:**



**1. Earmuffs**



**2. Earplugs**



**3. Ear caps or bands**

# Types of PPE

## 7. Body Protection

**The skin (covering the body) is the largest organ of the body, which also exposes it easily to occupational hazards. Body parts such as chest, torso, back, arm, legs must be protected from hazards such as:**

- Intense heat
- Cuts
- Hazardous chemicals
- Splashes from hot metals and other liquids
- Contact with potentially infectious materials, like blood
- Radiation

## Types of Body Protection

**There are different types of body protective clothing which includes:**

1. Coveralls
2. Full body suits
3. Sleeves
4. Apron



Coats including – including lab coats, insulated coats and other design

## Care of PPE

- ✓ Always check PPE for damage before and after use
- ✓ Clean PPE before storing
- ✓ Dispose of and replace damaged PPE
- ✓ Properly store PPE and avoid conditions that could damage them, such as heat, light, moisture, etc.
- ✓ Do not fix or repair a damaged PPE





# Community health nurses play a vital role in promoting and ensuring the effective use of personal protective equipment (PPE).

## Food Safety and Laboratory

- Bouffant & Hair Nets
- Masks
- Nitrile or Vinyl Gloves
- Cleanroom Gloves
- Sleeves
- Lab coats & Aprons
- Shoe Covers



## Manufacturing and Safety

- Hard Hats
- Safety Glasses
- Earplugs
- Cut Resistant Gloves
- Respiratory Protection
- Rainwear & Hi-Viz
- Slip Resistant Boots



**PERSONAL PROTECTIVE EQUIPMENT (PPE)**  
FOR HEALTHCARE WORKERS

## The role and responsibilities of a community nurse:

- ✓ **Education and Training:** They educate community members, healthcare workers, and patients about the proper use, selection, and limitations of PPE. This includes demonstrations on how to don and doff equipment safely.
- ✓ **Assessment:** Community health nurses assess the needs of specific populations regarding PPE. This includes identifying high-risk groups and the types of PPE required for their safety.
- ✓ **Implementation:** They help implement PPE protocols within community settings, ensuring that guidelines are followed, especially during outbreaks or pandemics.



- ✓ **Advocacy:** Nurses advocate for access to appropriate PPE, especially for vulnerable populations or frontline workers, and work to secure resources for communities in need.
- ✓ **Monitoring and Evaluation:** They monitor compliance with PPE usage and evaluate the effectiveness of PPE strategies in preventing the spread of infectious diseases.
- ✓ **Support:** Providing emotional support and counseling to individuals and families regarding the use of PPE, addressing fears, and promoting health literacy.
- ✓ **Collaboration:** Working with local health departments, organizations, and other healthcare providers to coordinate PPE distribution and education efforts.

## References

- Harris N, Grootjans J. The application of ecological thinking to better. 2012 - Park's text book of preventive and social medicine. –
- Stanhope, & Lancaster, 2021. Foundations for population - Community Health Nursing in Canada - The future of nursing.

