

Unit 4

WORKPLACE HEALTH AND SAFETY

Chapter 4.1

Noise hazard- Particulate matter- musculoskeletal disorder improper sitting poster and lifting Ergonomics RULE & REBA:

Noise Hazard:

1. Definition:

- Define noise hazard as excessive, unwanted sound that can potentially cause hearing damage or other health issues.

2. Identification:

- Explain how to identify sources of noise in the workplace.
- Emphasize the importance of conducting regular noise assessments.

3. Effects on Health:

- Highlight the potential health effects of prolonged exposure to high levels of noise, including hearing loss, stress, and reduced productivity.

4. Protective Measures:

- Encourage the use of hearing protection devices (earplugs, earmuffs).
- Implement engineering controls to reduce noise levels where possible.

5. Training:

- Provide training on the proper use of hearing protection and the importance of reporting any signs of hearing issues.

Particulate Matter:

1. Definition:

- Define particulate matter as tiny particles suspended in the air that can pose respiratory and other health risks.

2. Sources in the Workplace:

- Identify common sources of particulate matter in the workplace, such as dust from manufacturing processes or construction activities.

3. Health Impacts:

- Discuss the potential health impacts, including respiratory problems, allergies, and eye irritation.

4. Preventive Measures:

- Emphasize the use of personal protective equipment (respirators, masks).
- Implement engineering controls such as ventilation systems and dust collectors.

5. Hygiene Practices:

- Promote good hygiene practices, including regular handwashing to minimize exposure.

Musculoskeletal Disorders (Improper Sitting Posture):

1. Proper Sitting Posture:

- Illustrate the correct sitting posture with a clear and engaging poster.
- Emphasize the importance of maintaining a neutral spine, proper chair height, and positioning of the computer monitor.

2. Adjustable Ergonomic Furniture:

- Encourage the use of adjustable chairs and desks to accommodate different body types and sizes.

3. Regular Breaks:

- Remind employees to take regular breaks and stretch to reduce the risk of musculoskeletal disorders.

4. Ergonomic Accessories:

- Highlight the use of ergonomic accessories such as lumbar supports and wrist rests.

Musculoskeletal Disorders (Improper Lifting):

1. Lifting Techniques:

- Provide a visual guide on proper lifting techniques.
- Emphasize bending at the knees, keeping the load close to the body, and using the leg muscles.

2. Team Lifting:

- Encourage team lifting for heavy or awkward loads.
- Emphasize communication and coordination when lifting as a team.

3. Use of Mechanical Aids:

- Promote the use of mechanical aids (such as dollies or forklifts) for heavy loads.

4. Training Programs:

- Conduct regular training programs on safe lifting practices.
- Include information on the potential consequences of improper lifting.

Ergonomics (RULA & REBA):

1. RULA (Rapid Upper Limb Assessment):

- Introduce RULA as a systematic process for evaluating the risk factors associated with upper limb tasks.
- Provide training on how to use RULA to assess and improve workstations.

2. REBA (Rapid Entire Body Assessment):

- Explain REBA as a tool for assessing whole-body postural risks.
- Illustrate how to apply REBA to identify and mitigate ergonomic risks in various job tasks.

3. Employee Involvement:

- Encourage employees to actively participate in ergonomic assessments and provide feedback on potential improvements.

4. Continuous Improvement:

- Emphasize the need for regular reviews and updates to ergonomic practices based on changing work conditions or feedback from employees.