



SAFETY



&

HEALTH IN THE CONSTRUCTION SITE



NATIONAL CONSTRUCTION
AUTHORITY
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OBJECTIVE

- Understand the different types of existing hazards on site
- Comprehend the different types of accident measurement approach
- Appreciate the importance for improving health & safety in construction

Potential hazards for workers in construction include:

- Falls (from heights)
- Trench collapse
- Scaffold collapse
- Electric shock
- Failure to use proper personal protective equipment and.
- Repetitive motion injuries.

Ergonomic Hazards

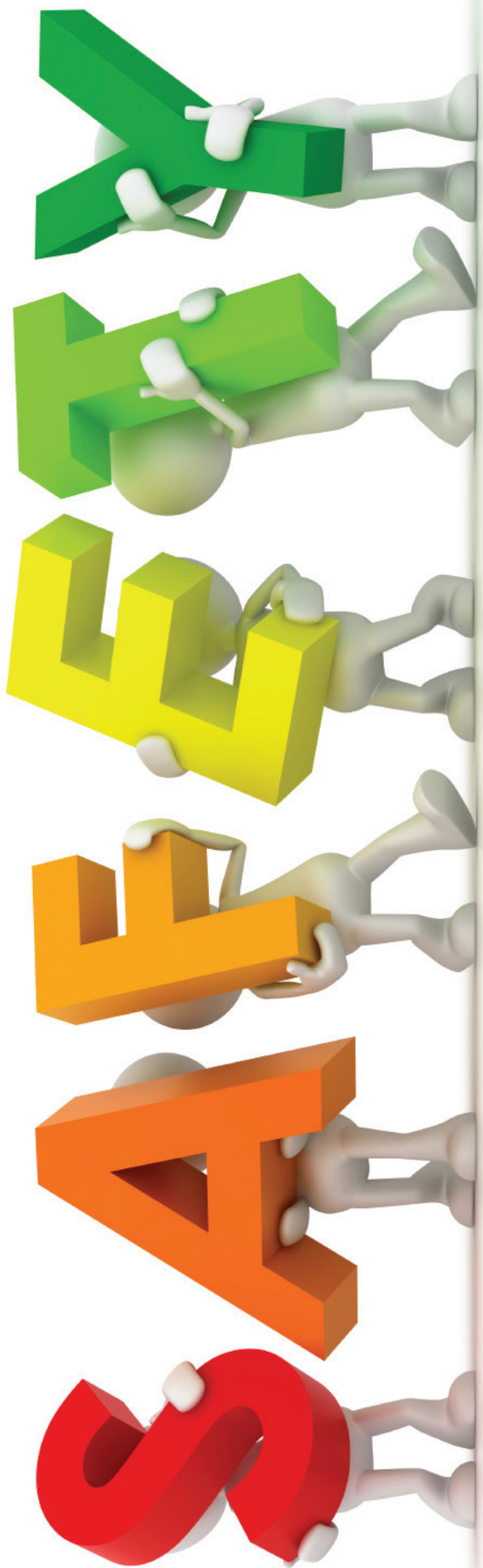
Ergonomic hazard is a physical factor within the environment that harms the musculoskeletal system

- heavy, frequent, or awkward lifting
- awkward grips, postures
- using excessive force, overexertion
- using wrong tools for the job
- or using tools improperly
- using improperly maintained tools
- hand-intensive work

Accident Analysis



Heinrich 300-29-1 Model



Impact of overall performance

- Time
- Budget
- Accident statistics –Absentism
- Low morale

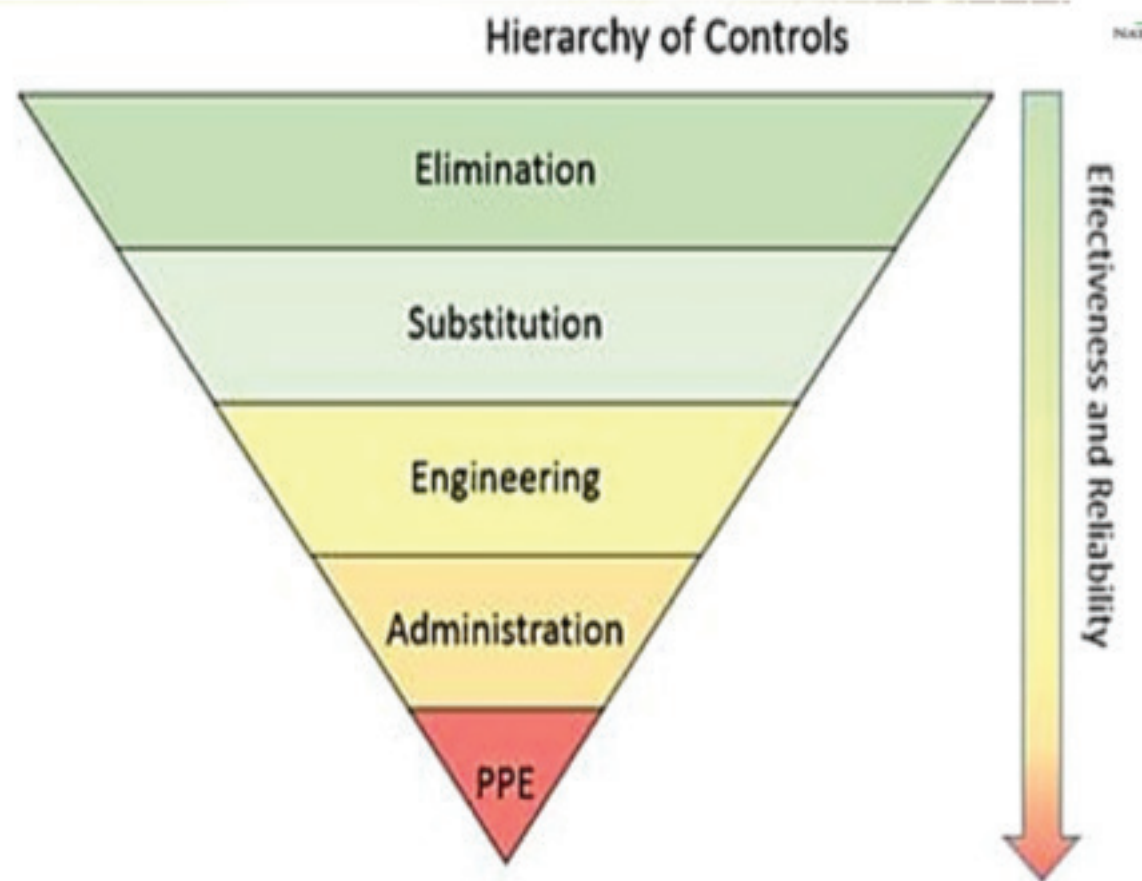
Hazard Controls

Six Step Hazard Control Process



Five General Hazard Areas

- 1. Materials** - liquids (i.e., acids, bases, toxins), solids (i.e., wood, metal, plastic), and gasses (flammables, and explosives).
- 2. Equipment** - includes machinery, vehicles, tools, and devices.
- 3. Environment** - noise, temperature extremes, atmospheres, biological, and workstation design.
- 4. People** - anyone in the workplace (i.e., employees, guests, customers or contractors).
- 5. System** - flawed policies, programs, plans, processes, procedures, and practices.



The hierarchy of controls :

1. Eliminate the hazard altogether.

Ex:- Get rid of the dangerous machine.

2. Substitute the hazard with a safer alternative.

Ex:- replace the machine with a safer one.

3. Use engineering controls to reduce the risk.

Ex:- Attach guards to the machine to protect users.

4. Use administrative controls to reduce the risk.

Ex:- Train workers how to use the machine safely.

5. Use personal protective equipment (PPE).

Ex:- Wear gloves and goggles when using the machine.

Consequences of Accidents

- Death
- Fatal injury (broken leg, hips, amputation) • Non-fatal injury (finger cut)
- Occupational accidents (hearing loss)
- Absence from work
- Near misses

Safety Responsibility

- Safety is everyone's responsibility.
- It is a moral and legal obligation of employers to provide a safe working place and of employees to work safely.

