



OPENCOURSEWARE

CONSTRUCTION SAFETY: 13

SAFETY TRAINING PROGRAMME

SBC 3363

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Contents

1. Organisation structure and roles
2. Implementation of safety management, audit and review
3. Monitoring
4. OSH policy-important & development
5. **Safety training programme**

Du Pont Ten Principles of Safety Management

- All injuries and occupational illnesses are preventable.
- Management is directly responsible for doing this.
- Safety is a condition of employment.
- Training is required.

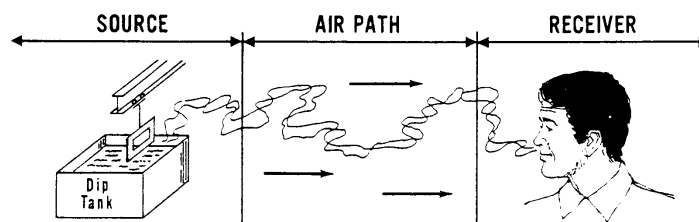
Du Pont Ten Principles of Safety Management

- Safety audits and inspections must be carried out.
- Deficiencies must be corrected promptly.
- All unsafe practices, incidents and injury accidents will be investigated.

Du Pont Ten Principles of Safety Management

- Safety away from work is as important as safety at work
- **Incident prevention is cost-effective**; the highest cost is human suffering.
- **Employees** must be **actively involved**.

Principle of Control



- Substitution
- Modify process
- Enclosure
- Local exhaust
- Fugitive emission control
- Isolation

- Housekeeping
- General ventilation
- Continuous area monitoring
- Dilution ventilation
- Automation or remote control

- Training and education
- Worker rotation
- Enclosure of worker
- Personal monitoring
- Personal protective devices

Promotional Technique

Use **combinations** of the following techniques to reinforce health and safety message.



Traffic Management (PDRM)



Promotional Technique

- Leading by example
- Employee involvement
- Use of reward, incentives and disincentives
- Best practice
- Communication
- Training

Leading By Example

- Management at all levels and on all occasions must never ignore safety rules
- Use of non-verbal communications:
 - Top management seen to be committed
 - Safety is enforced by management at all levels and not by the safety officer alone
 - Suggestion implemented if appropriate
 - Management are aware of their non-verbal communication styles and is a good listener

Employee Involvement

- **Joint management-employee programmes:**
 - OSH safety day, week, month
 - Competitions
 - Management reporting of Incidents on notice boards, bulletins and newsletters
 - On-going hazard spotting and near-miss reporting, inspections, house-keeping, etc.
- **Management interactions** through meetings, committees and gatherings

Scaffolding Erection Course (ABM)



Use Of Rewards Recognition Incentives And Disincentives

- **Rewards Recognition Incentives** are well-known techniques used for motivations.
 - In some organisations good performance in OSH is employee's term of employment
 - Annual bonus penalty against non-performing departments
 - Need to be careful. It might resulted in less or none reporting of incidents
 - Disincentives through penalties and contract award used on contractors

Best Practice

- **Top management provides leadership**
- **Safety controls must be designed** into every aspect of the organisation
- **Managers at all levels are responsible for safety and health** – safety first and no shortcuts

Best Practice

- Objectives and Targets setting
- Enforcement of high quality standards
- Adoption of occupational safety and health management systems standards

Employee Attitude Survey

- Measures employees' perceptions; perception is reality
- Productivity and morale is closely linked to perceptions of their work environment
- Questions e.g.
 - Quality of management communications
 - Satisfaction with employee training
 - Safety and health concerns
 - Cooperation among peers and workgroups
 - Understanding a corporate goals and mission

Why Train And Retrain?

- Instructions and procedures alone is not sufficient.
- Shortcut for learning from experience.
- Employees need to know what they are looking at or what to do and what to look for.
- Cannot assume experience from previous employer is similar.
- Materials, processes and technology may have changed.

Common Sense? A Mistaken Assumption!

- Training and common sense
 - Sound judgements could only be developed over time through experience and specific workplace settings and specific tasks.



Legal Requirements

- Regulation require training and com of workers.



Legal Requirements

- For example:
 - Factory And Machinery Act 1967
 - Lead Regulations 1984, Asbestos Process Regulations 1986, etc.
 - Occupational Safety And Health Act 1994
 - USECHH Regulations 2000, CIMAH Regulations 1996, Safety and Health Committee Regulations 1996, SHO Regulations 1997
 - Operator competency requirements
 - Crane, scaffold, forklift, engine driver, charge man, confined space, etc.

Assessing Training Needs

- Begin the assessment by establishing:
 - Aims and objectives of training
 - Time scale
 - Level at which training is required
- Conduct a training needs analysis:
 - Identify job to be done and skill required
 - Analyse skill which individuals already have
 - Identify skills gaps
 - Train to cover the shortfall

Levels Of Training

- Awareness
- general
- Specific
- Skills
- Competencies



Training Documentation

- Should be kept for all employees and contractor training:
 - Type
 - Names of trainees
 - Checks on learning
 - Date
 - Date / type of next training

Training on PPE

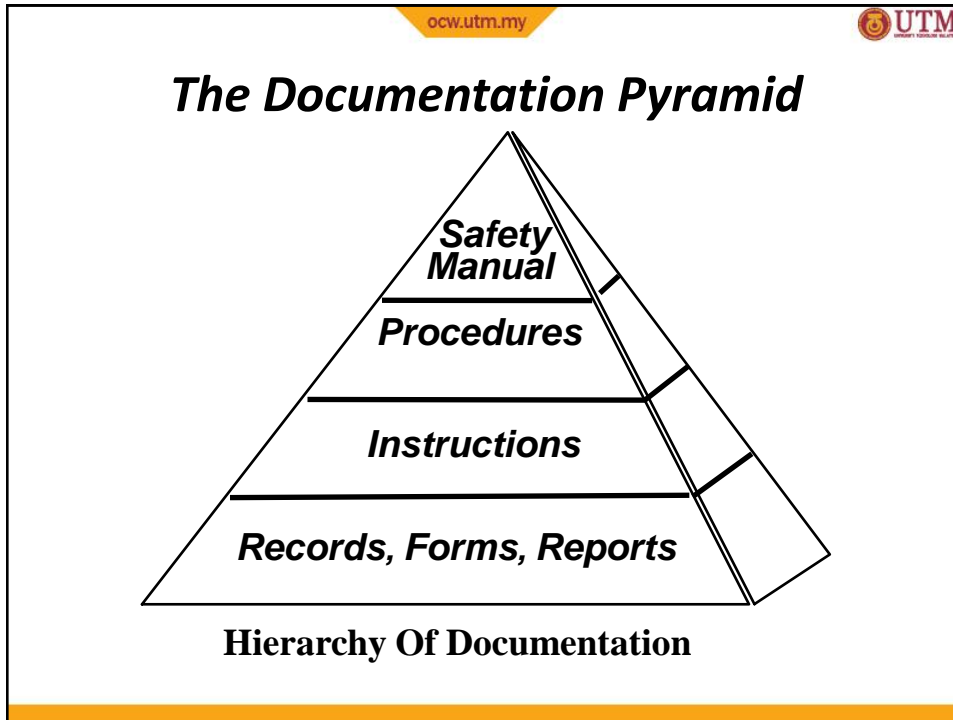
- Hazard recognition in the work environment
- What control measures can be taken
- The type of PPE suitable for use
- The limitations of PPE
- Demonstration of correct use

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Levels Of Documentation

- What is a document
 - Paper or booklet providing information
 - Record or report in detail
- There are four levels of documentation
 - Manual
 - Procedures
 - Instructions
 - Forms and records



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What are OSH Manuals For?

- Provide information for effective control of hazards in the workplace
- To control OSH management activities in accordance with requirements

UTM

The slide features a title 'What are OSH Manuals For?' followed by two bullet points. The slide includes a logo for 'ocw.utm.my' in the top left and 'UTM' in the top right.

Contents Of OSH Manual

- Statements, procedures, instructions and records
- The manual at the minimum contain:
 - OSH policy statement and OSH objectives
 - Assignment of roles and responsibilities for
 - List of significant hazards/risks and arrangements for prevention and control
 - Personnel competency and training records
 - Procedures, instructions and other internal documents for OSH management

Toolbox Meeting

- Toolbox meetings are carried out regularly:
 - Every morning by the supervisor before the workers start their work
 - To remind workers of the danger or hazards in the workplace during the activities for the day
- Brief (10-15 minutes) and on one topic
- Attention is given to requirement for attendants and participation at the meeting



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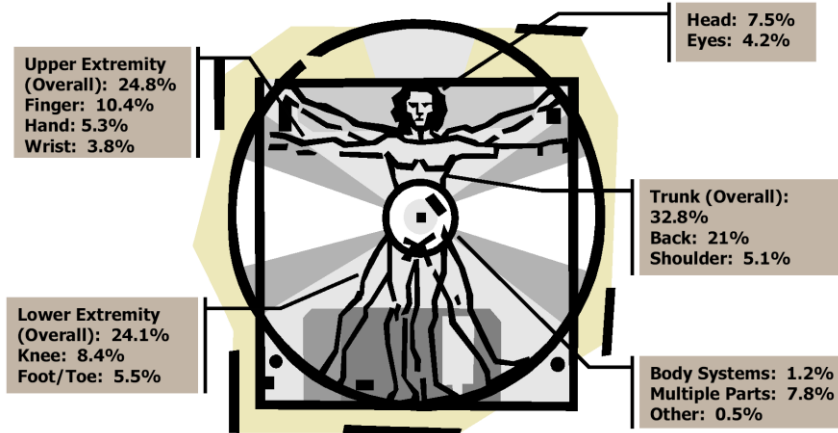
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Importance Of Communication

- Most of our working life is spent communicating: to get things done, to report or to receive instructions
- Job of SHO to communicate to workers, colleagues, managers and the authorities
- SHO must be aware of his verbal and non-verbal impact on the job

Construction Injuries by Body Part



Source: U.S. Bureau of Labor Statistics, 2001

Personal Protective Equipment (PPE)

	Body Part(s)	Protective Equipment
	Head, Eyes, Ears	Hardhat/Helmet, Safety Glasses, Earplugs, Ear Protection, Masks, Breathing Equipment
	Upper Extremity: Arms, Wrists, Fingers	Safety Gloves, Safety Clothing, Eliminate Rings on Hands
	Lower Extremity: Legs, Ankles, Feet, Toes	Steel Toe Shoes/Boots
	Trunk: Back, Shoulder	Back Supports, Safety Clothing

THANK YOU