

Ergonomics

Z HSE-29

Duration :

Five Days 25 Hours

Who Should Attend :

All members and workers in the industrial and managerial sectors

Language :

Arabic, English



Overview

The increased rate and high cost of ergonomic injuries and illnesses such as carpal tunnel syndrome, tendonitis and MSDs cut across all industries and occupations. Some of the hardest hits are manufacturing, retail, and service industries. Take a look at your OSHA 300 Log. You will probably notice that most (30% - 50%) of your recordable injuries are somehow related to ergonomics.

Topics

- Introduction to Ergonomics
 - Definition of Ergonomics
 - History of Ergonomics
 - Ergonomics in the workplace
 - Ergonomics and Health and safety
 - Economics of Ergonomics
 - Ergonomic programs
 - Get Excited: Success stories
 - Definitions
- Body Tissues and Disorders Associated with Physical Work Characteristics
 - Muscle
 - Tendon
 - Peripheral Nerve
 - Spinal Disc
 - Joints
 - Other body systems: Vascular, Metabolic and
 - Temperature Regulation, Hearing, Sight
 - Mechanism of Injury
- Risk Factors
 - Risk factors
 - Multifactor Nature of MSDs

- Identification / Documentation of Risk Factors
 - Passive / Active Surveillance
 - Tools: Checklists and surveys
- Anthropometry, Posture, and the Ergonomics Upper Extremity Intensive Tasks
 - Anthropometry
 - Tools: Posture Evaluation / Upper Extremity
- Ergonomics of Lifting / Lowering Tasks
 - Muscle Strength and Biomechanics
 - Mechanism of Injury
 - Moment Concepts
 - Psychophysics
 - NIOSH
 - Tools: 2D Model, Liberty Mutual Tables, NIOSH
- Ergonomics of Push / Pull / Carry Tasks
 - Metabolic concepts
 - Evaluation Methods
 - Tools: Bernard / Garg
- Controls and Displays
 - Man / Machine interaction
 - Control and display guidelines
 - Panel layout guidelines
- Ergonomic standards and guidelines
 - Organizations that write standards and guideline documents
 - Occupational safety and health act
 - U.S. state ergonomics standards
 - The Americans with disabilities Act
 - Hand-Arm (Segmental)Vibration
 - Whole-Body vibration
 - Heat stress
 - Noise
 - Health and safety program management for
 - cumulative trauma disorders and other ergonomic
 - hazard-induced disorders
 - Ergonomic consideration in the design, installation and use of manufacturing system
 - Video display terminal workstations
- Prevention and control of Ergonomic risk conditions
 - Engineering controls
 - Case studies and product solutions
 - Administrative controls
 - Personal protective equipment
 - Medical management
 - Training and education
- Office Ergonomics
 - Posture
 - Standards and guidelines
 - Tools: VDT checklists
 - Controls and solutions