

Human Error Analysis & Prevention





# **Human Error Analysis & Prevention**

REF: C722 DATE: 6 - 10 October 2024 Venue: Cairo (Egypt) - Fee: 4095 Euro

## Introduction:

Human errors refer to the environmental, organizational, and job factors, and human and individual characteristics which influence the behavior at work in a way which can affect an organization be health and safety performance. A simple way to view human error is to think about three aspects: the job, the individual and the organization, and how they interact to impact health and safety-related human behavior.

After an accident involving human failure - using human error analysis tools can identify the causes and contributing human error factors. Establishing these underlying causes of an accident/incident is the key to preventing similar human error accidents/incidents.

This conference is aimed at providing delegates with the practical on-site knowledge and skills to develop and successfully implement effective human error analysis techniques.

# Conference Objectives:

At the end of this conference the participants will be able to:

- Learn the underlying reasons why human errors occur
- Explain the various human error analysis techniques and how they can be used
- · Learn how to assist others in your organization in dealing with human performance in your operations
- Show how human behavior can lead to human errors and incidents/accidents
- Review practical case studies to show how other organizations have used human error analysis techniques to prevent human errors in the workplace

## Targeted Audience:

- HR Professionals
- Those seeking new prevention and mitigation approaches to solve human performance problems
- Those seeking techniques to analyze facilities, systems, and operations proactively and reactively

## Conference Outlines:

#### Unit 1: Introduction to Human Error:

- · What is human error?
- Understanding the different types of human error
- Human Error related workplace and job task causation factors
- Human failures in the causes of accidents/incidents
- Define human error and prevention objectives



# Unit 2: Human Error Analysis Factors:

- Managing Rule-Breaking situations Violations
- Human behavior patterns leading to human errors
- Cultural behavior and sensory and perception
- Using the Shell <code>[Hearts</code> and Minds<code>[]</code> toolkit to improve human behavioral factors
- The different types of human errors and prevention options

## Unit 3: Observation Methods for Unsafe Acts and Conditions:

- Using the Dupont <code>ISTOPI</code> on-site safety observation tool for
  - o Observing Substandard Practices and behavior
  - Observing Substandard Conditions
- Using IJob Safety Analysis to identify and assesses types of human errors
- Identify human errors of presented accident scenario

## Unit 4: Human Error Analysis Techniques:

- Analyzing site operations human error situations
- Using the "Human Reliability Assessment" HRA human error analysis technique
- Human error observation and prevention options
- Options and Solutions for preventing human errors
- Using the Fault Tree Analysis method to analyze human errors

## Unit 5: Human Error Analysis & Prevention - Getting Started:

- · Identifying and categorizing human errors in the workplace
- · Considering Human factors when analyzing incidents and accidents
- Review of Human factors in existing work methods and procedures
- · Human error analysis within the health and safety management system
- · Checklist for observing human errors in the workplace