

€ TRAINING

Human Error Analysis and Prevention



7 - 11 April 2025
Barcelona (Spain)



Human Error Analysis and Prevention

REF: S453 DATE: 7 - 11 April 2025 Venue: Barcelona (Spain) - Fee: 6145 Euro

Introduction:

This training program is designed to equip professionals with the knowledge and tools necessary to identify, analyze, and mitigate human errors in various industries. It empowers them to proactively address human error risks and enhance operational performance.

Conference Objectives:

At the end of this program, participants will be able to:

- Understand the underlying reasons why human errors occur.
- Explain various human error analysis techniques and their applications.
- Address human performance issues preemptively to prevent problems.
- Assist colleagues within their organization in managing human performance in operations.
- Identify how human behavior can lead to errors and incidents, offering strategies to mitigate risks.
- Apply practical methods for observing and preventing human errors, drawing from real-life case studies to illustrate effective techniques implemented by other organizations.

Targeted Audience:

- Industrial engineers and safety professionals seeking to mitigate human errors in manufacturing and industrial environments.
- Aviation and transportation personnel interested in understanding human factors contributing to accidents and incidents.
- Healthcare providers and administrators aiming to improve patient safety by addressing human errors in medical practices.

Program 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 "Hearts and Minds" 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 "STOP" on-site safety observation tool.
- Observing Substandard Practices and behavior.
- Observing Substandard Conditions.
- Using "Job 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.