

# BEHAVIOR BASED SAFETY (BBS)

## HSE058

### COURSE DESCRIPTION

Health and safety technology and procedures are very important aspects of health and safety management. However, on their own, these will not provide a continuous improvement in health and safety and environmental performance. Health and safety enforcement agencies advise that failure of these systems account for only small percentages of accidents. The cause of most workplace accidents and incidents is directly related to human failure. Three thousand people are killed each day worldwide. Over 90% of these deaths are caused by unsafe behaviors of people in management and in the workforce. In this program you will look in-depth at the factors that impact on human failure:

- Organizational aspects that influence human failure.
- Task factors that will increase or decrease human failure.
- Individual factors that will impact on human failure.
- How to develop a positive Safety Culture.

### COURSE OBJECTIVES

By the end of this course, participant will be able to:

- Understand what behavior is?
- Know why people are prepared to take unnecessary risk.
- Be able to observe and assess behavior at work.
- Understand 'latent' and 'active' failure.
- Know how to change at risk behavior (latent and active).
- Know how to introduce these tools into their organization.
- How improve risk perception within the organization.
- Know the seven main categories of human failure.
- Know what a safety culture is and how can it be measured and improved.
- Know how to conduct a Safety Culture survey and develop action plans & create continuous improvement.

### WHO SHOULD ATTEND

- Line managers at all levels and disciplines in the organization
- HSE Advisors
- No previous experience in health and safety or behavioral safety is necessary.
- Adequate guidance is given during this program through individual and group activity.

## COURSE DURATION

5 Working Days

## COURSE OUTLINES

### 1. Developing Health & Safety Management Systems to Incorporate a Behavioral Approach

- Program introduction: delegate and tutor introductions; Program objectives
- Historical overview of health and safety performance
- Introduction to HSE Management Systems (Plan, Do, Measure, and learn)
- Task-based risk assessment and why it doesn't always work
- Introduction to human error
- The 7 different types of human error
- Overview of Task, organization and Individual aspects that influence human factors
- Case study and syndicate exercise: Challenger & Columbia disasters
- Report back and review

### 2. Tasks Aspects That Influence Human Factors

- In depth look at the task aspects that influence human factors
- What shapes and models perception
- A theoretical model of perception at work
- Case studies Kings Cross sub-way fire & Bradford City football club fire
- Analytical techniques for assessing risk perception
- Syndicate exercise
- Report back and review

### 3. Organizational Aspects That Influence Human Factors

- Roles and accountabilities
- The effect of group pressure on individuals
- Organizational pressure (real and perceived)
- Case study and analysis
- Syndicate exercise (Lessons from Longford compared with Lessons from Flixborough)
- Changing styles for changing behavior
- Review

### 4. Individual Aspects That Influence Human Factors

- Introduction to behavioral observations
- Observation systems

- Syndicate exercise Zeebrugge sea disaster and Channel Tunnel rail incident
  - Introduction to culture in the workplace
- 5. Measuring HSE Culture (Triangulation Using Survey, Interviews and Direct Observation and Feedback)**
- Safety Culture Maturity Model
  - Action planning for improving culture
  - Review
- 6. Accident Analysis Case Study**
- Investigate an incident in the light of Task, Organization, and Individual aspects of Human factors
  - Review Health and safety management systems in the light of human factors
  - Case Study: Piper Alpha offshore disaster working in small groups on accident analysis
  - Preparation of action plans, planning and implementing
  - Report back and discussion
  - Personal action plans, program review and the way ahead

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