



A-Z SEED - H

HUMAN ERROR

Number of factors that can contribute to human error which can be a significant causative feature of accidents at work.

Factors contributing to human error

Inadequate information

People do not make errors merely because they are careless or inattentive. Often they have understandable (albeit incorrect) reasons for acting in the way they did. One common reason is ignorance of the production processes in which they are involved and of the potential consequences of their actions.



Lack of understanding

This often arises as a result of a failure to communicate accurately and fully the stages of a process that an item has been through. As a result, people make presumptions that certain actions have been taken when this is not the case.

Inadequate design

Designers of plant, processes or systems of work must always take into account human fallibility and never presume that those who operate or maintain plant or systems have a full and continuous appreciation of their essential features. Indeed, failure to consider such matters is, itself, an aspect of human error. Where it cannot be eliminated, error must be made evident or difficult. Compliance with safety precautions must be made easy. Adequate information as to hazards must be provided.



Lapses of attention

The individual's intentions and objectives are correct and the proper course of action is selected, but a slip occurs in performing it. This may be due to competing demands for (limited) attention. Paradoxically, highly skilled performers may be more likely to make a slip because they depend upon a finely tuned allocation of their attention to avoid having to think carefully about every minor detail.

Mistaken actions

This is the classic situation of doing the wrong thing under the impression that it is right. For example, the individual knows what needs to be done, but chooses an inappropriate method to achieve it.

Misperceptions

SAFETY AND ENVIRONMENTAL EDUCATION FOR DEVELOPMENT

SEED

www.seedforsafety.org



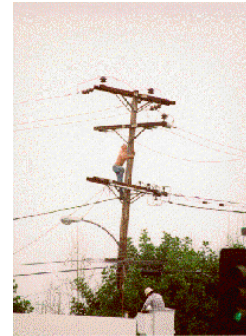


A-Z SEED - H

Misperceptions tend to occur when an individual's limited capacity to give attention to competing information under stress produces 'tunnel vision' or when a preconceived diagnosis blocks out sources of inconsistent information. There is a strong tendency to assume that an established pattern holds good so long as most of the indications are to that effect, even if there is an unexpected indication to the contrary.

Mistaken priorities

An organization's objectives, particularly the relative priorities of different goals, may not be clearly conveyed to, or understood by, individuals. A crucial area of potential conflict is between safety and other objectives, such as output or the saving of cost or time. Misperceptions may then be partly intentional as certain events are ignored in the pursuit of competing objectives. When top management's goals are not clear, individuals at any level in the organization may superimpose their own.



Wilfulness

Wilfully disregarding safety rules is rarely a primary cause of accidents. Sometimes, however, there is only a fine dividing line between mistaken priorities and wilfulness. Managers need to be alert to the influences that, in combination, persuade staff to take (and condone others taking) short cuts through the safety rules and procedures because, mistakenly, the perceived benefits outweigh the risks, and they have perhaps got away with it in the past.



Elimination of human error

For the potential for human error to be eliminated or substantially reduced, all the above factors need consideration in the design and implementation of safe systems of work, processing operations, work routines and activities. Training and supervision routines should take account of these factors and the various features of human reliability.

SAFETY AND ENVIRONMENTAL EDUCATION FOR DEVELOPMENT

SEED

www.seedforsafety.org

