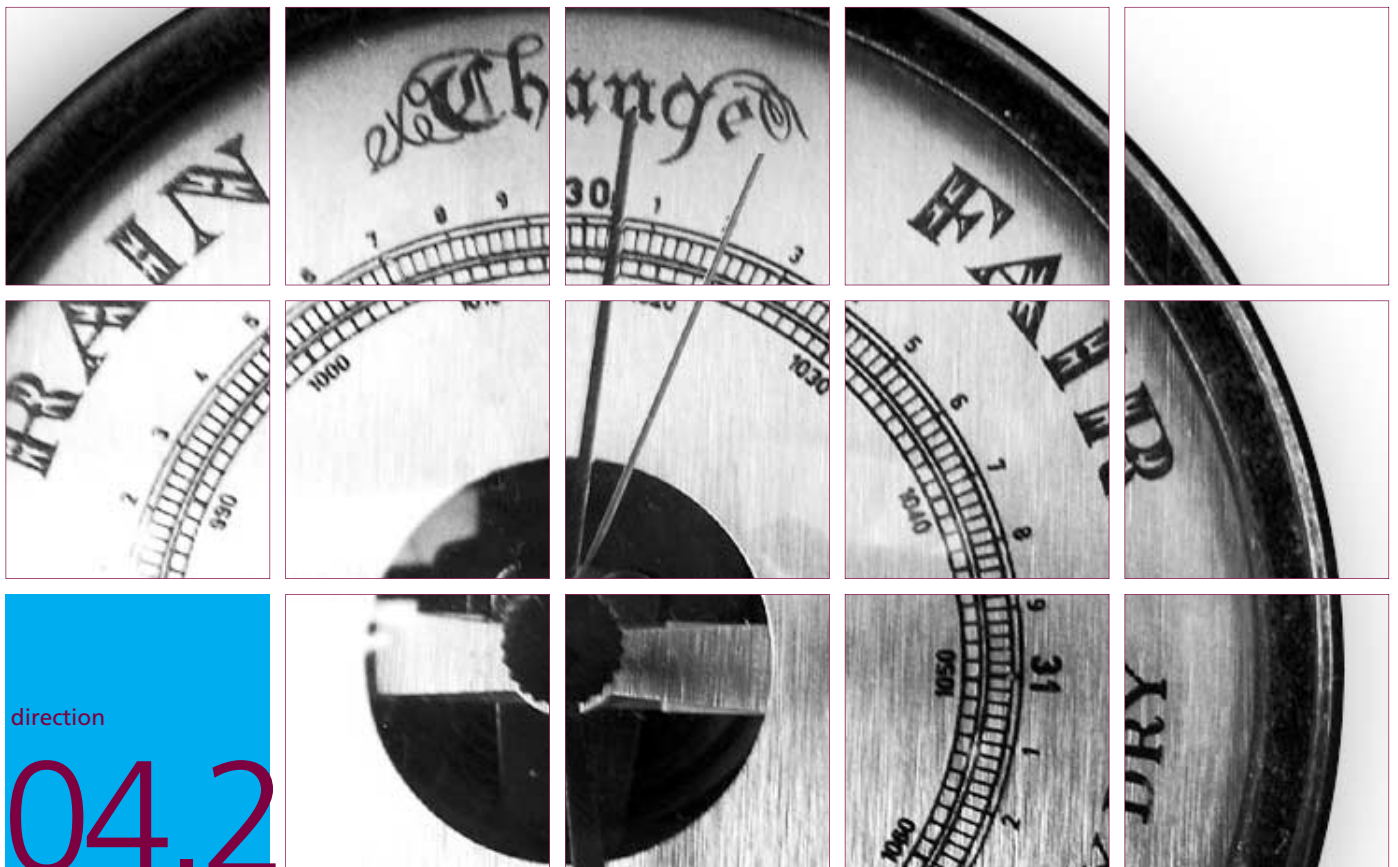




Promoting a positive culture





IOSH publishes a two-tier range of free technical guidance. Our guidance literature is designed to support and inform members and motivate and influence health and safety stakeholders.

Direct info

Brief, focused information on health and safety topics, typically operation- or sector-specific.

Direction

Strategic corporate guidance on health and safety issues.

Promoting a positive culture

a guide to health and safety culture

Contents

Acknowledgements

Foreword

1. Overview	06
2. Towards a positive health and safety culture	07
3. IOSH guidance	11
4. IOSH training	12

References

Further reading

List of Figures

Fig. 1 OSH risk management	06
Fig. 2 Safety Culture Maturity model	08
Fig. 3 Safety culture change process	10

Case studies

1. Use of health and safety Climate Survey Tool	09
2. Implementing a behavioural safety programme	09
3. Partnership working to improve health and safety culture	11

Acknowledgements

The Technical Affairs Committee would like to thank Dr Kevin Fitzgerald of ABB for his authorship of this guidance, which replaces the previous IOSH document 'Health and safety culture' (1997).

Foreword

IOSH guidance aims to inform members and others with an active interest in occupational safety and health. It is developed by groups of members, in consultation as appropriate, to ensure that at the time of publication it represents best practice and current thinking on the topics concerned. IOSH guidance is designed for use in a variety of ways; however, the ultimate aims are:

- to guide IOSH members and others in working together to prevent work-related accidents and ill health
- to assist trainers and educators to include reference to relevant standards and best practice in their curricula.

The majority of IOSH members are UK based but many, including members in Hong Kong, the Republic of Ireland and elsewhere, advise organisations with non-UK interests. As far as possible, guidance is developed so as to be applicable to all.

IOSH welcomes all comments aimed at improving the quality of guidance, including details of non-UK references and good practices. Comments should be sent to:

[Director of Technical Affairs](#)

IOSH
The Grange
Highfield Drive
Wigston
Leicestershire
LE18 1NN
UK

August 2004

1. Overview

It is now generally recognised that the management of health and safety should embrace – in a holistic way – the interactions between the working environment, equipment, systems and procedures, and the people within the organisation.

Effective risk management depends, in part, on the behaviour of individuals within an organisation, and a significant number of accidents can be traced to unsafe behaviours. Poorly designed equipment or operations, poor systems and poor working conditions can all encourage unsafe behaviours; however, such unsafe behaviours are not inevitable. An organisation's attitudes and values regarding safe working are important factors that influence the approach to work, and ultimately to an organisation's health and safety performance. Put another way, it is insufficient to provide safe equipment, systems and procedures if the culture is not conducive to healthy and safe working.

Safety culture has been defined¹ as consisting of shared values (*what is important*) and beliefs (*how things work*) that interact with an organisation's structure and control systems to produce behavioural norms (*the way we do things around here*). A poor health and safety culture is likely to lead to weaknesses due to underperformance at the person–work interface – perhaps because of poor training or communication. It will encourage an atmosphere of non-compliance with good operating practices, and it will not facilitate taking effective action to remedy health and safety problems.

The challenge is to influence organisational health and safety cultures positively. It is hard to change the attitudes and beliefs of a workforce by direct persuasion, but by acting safely workers can start to think safely.² This belief has led to the development of today's 'behavioural safety' approaches.

Safety culture has been cited as a concept whose 'time has come'.² Its critical role in determining organisations' safety performance is not in doubt, yet the cause, content and consequences of safety culture are still unclear.³ Moreover, it must be recognised that culture can be changed only slowly, and that fundamental change requires time.

Occupational safety and health (OSH) professionals must seek to apply current thinking in a practical way to achieve healthier and safer working environments. This IOSH guidance is intended to provide some pointers to healthier and safer working by characterising some aspects of a good health and safety culture and indicating some of the steps that can be taken to aid improvement.

It should be noted that, while most of the relevant references in this guide concentrate on 'safety' rather than 'health' cultures, the lessons are equally applicable to issues of workplace health. Indeed, because the links between poor workplace practices and resulting ill health can be less clear and enforceable than those relating to poor safety conditions and resulting injuries, the cultural issues linked to work-related health are arguably even more important than those affecting workplace safety.

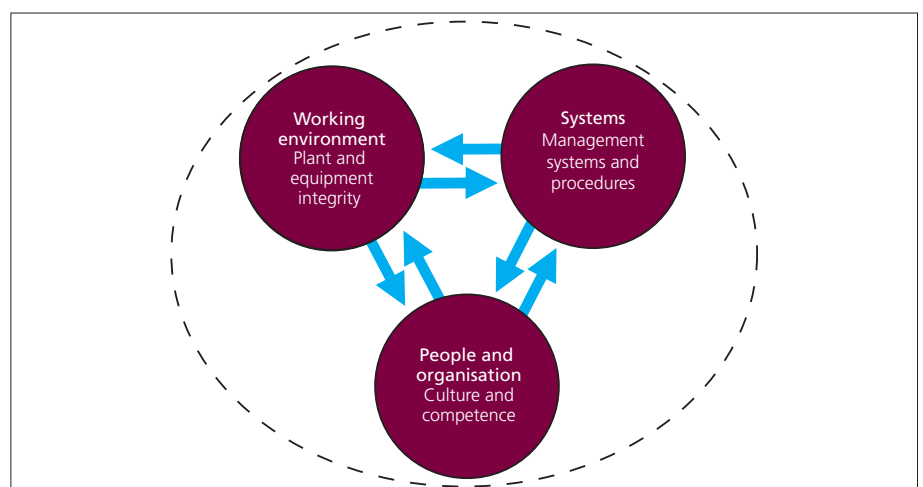


Figure 1 OSH risk management: managing the risks associated with interactions between the working environment, the management systems, the organisation and its people

2. Towards a positive health and safety culture

For all practical purposes, a 'healthy and safe culture' is the same as an 'informed culture'. An informed culture is defined as one in which the members of the organisation understand and respect the hazards of their operations, and are alert to the many ways in which the system's defences can be breached or bypassed.²

Many organisations have such low levels of reported injury/ill health that it is difficult, if not impossible, to base improvement plans on them. Improvement requires that knowledge of all incidents, near misses and concerns are captured and learned from.

The first requirement is to create a 'reporting culture', and along with this a culture of 'fair blame' in which standards are clear, yet all but the most reckless health and safety failures can be reported without fear of retribution. Reference is often made to a 'no blame' culture, yet it has been pointed out² that this is neither feasible nor desirable. A small proportion of unsafe acts deserve severe sanctions, and failure to recognise this would undermine the credibility of the organisation's culture. It is by no means easy to engineer a 'fair blame' culture, but it links directly to an organisation's understanding of the risks that it needs to manage; an informed culture will be better placed to appreciate the distinction between unsafe acts arising from lapses of concentration (for example) and those that are simply wilful. Clearly, it is important that where the organisation does attribute blame this does not undermine the 'reporting culture'.

In order to identify where an organisation's health and safety culture may need to be improved, one step can be to complete an assessment of the existing safety climate.* Safety climate surveys seek to characterise an organisation's culture using factors such as:

- the degree of leadership in health and safety and the commitment to healthy

and safe working that is demonstrated by senior management

- the level of employee communication, education and training in health and safety
- the extent of involvement of different levels of the workforce in the health and safety improvement process
- the responsibility which employees show for their own and for others' healthy and safe working
- the degree of tolerance of risk-taking behaviour
- how well good health and safety performance is measured and reinforced
- arrangements for periodic review of health and safety culture, and for the implementation of improvement plans.

By looking at these factors, it is possible to build a picture of an organisation and understand where opportunities for improvement lie.

Health and safety climate may be judged through questionnaire-based responses completed remotely. Whenever possible such coarse data should be supplemented by observations of behaviour and data gathered in workshops and focus groups, as these provide the richer picture which is needed to understand the underlying reasons behind behaviours. The output of such assessments can be used to:

- raise awareness of health and safety
- judge the organisation's current attitudes towards health and safety
- pinpoint areas requiring attention
- determine an organisation's readiness for a behavioural safety programme
- provide a baseline against which progress can be charted.

Safety climate surveys have been carried out in a number of industries, including offshore⁵ and nuclear.⁶ The UK government has produced a generic health and safety Climate Survey Tool,⁷ as well as a construction industry-specific tool⁸ as part of its 'Constructing excellence' campaign. If a safety culture is to be assessed, there is no alternative but to seek the opinions of an organisation's employees.⁶ The action plan that follows may focus on organisational changes, training

*The distinction between 'climate' and 'culture' is significant. The former embraces perceptions, attitudes and beliefs about risk and safety, is typically measured using questionnaires, and provides a 'snapshot' of the current state of safety; the latter is more complex and long-lasting, and reflects more fundamental values.⁴

programmes or behavioural safety, and the survey will help organisations to target⁶ resources where they are needed (see case studies on pages 09 and 11).

Health and safety culture change is not achieved quickly, and plans to improve the culture of an organisation should take into account that the existing culture will have evolved over an extended period. A culture change programme is also very unlikely to succeed unless there is commitment to change and leadership at the highest management levels. Attempts to change culture too quickly may result in resistance to change.

An important ingredient of plans to promote a positive health and safety culture is 'organisational learning' – the process of involvement of personnel who learn to change their ways of thinking and acting as

a result of shared experience and addressing shared problems. Mutual trust and confidence between management and workforce are necessary for the development of a strong health and safety culture, and it is vital that managers at all levels accept that health and safety is a line management responsibility.

A review of behaviour modification programmes has shown that change programmes that succeed at one location can fail at another.⁹ The factors that increase or decrease the chance of success have been identified and can be linked to the existing culture of the organisation. A 'maturity' model for culture has been developed¹⁰ that provides a framework to assist in the selection and implementation of behavioural interventions that are most appropriate to the organisation. The five stages of this model are shown in Figure 2.

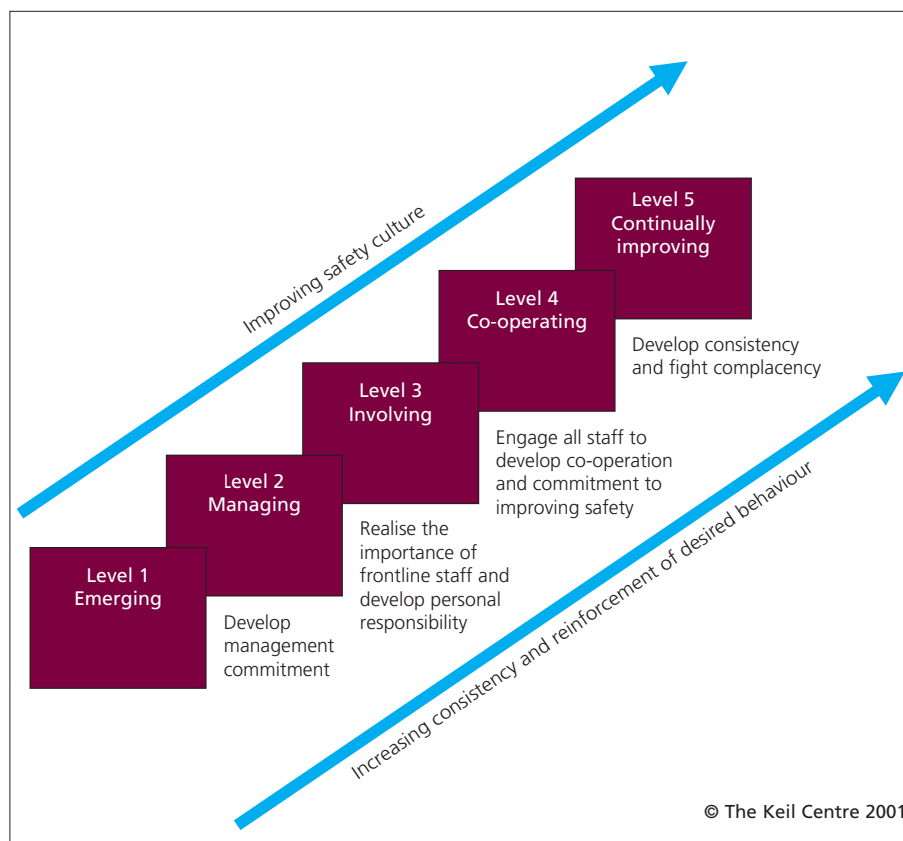


Figure 2 Safety Culture Maturity^{®*} model

*Safety Culture Maturity is a Registered Trademark of The Keil Centre Ltd.



1. Use of health and safety Climate Survey Tool

In 2002, the Health and Safety Executive (HSE) contacted three organisations that had used its generic health and safety Climate Survey Tool (CST) to obtain feedback.¹¹ A nuclear fuels manufacturer reported that, in order to obtain a higher response rate, it had:

- programmed the work to make sure the schedule was achievable and that results could be reported quickly
- publicised what it was doing and why, and set targets for response rates
- encouraged employees to complete the survey in work time and sent a letter with the CST reminding employees why the CST was being used
- guaranteed that responses would be treated anonymously and individual respondents would not be identified

- provided respondents with envelopes addressed to the contractor conducting the data analysis, again to provide confidence in anonymity
- created safety events to reinforce the reason for the CST and issued the survey immediately afterwards.

The company reported finding the CST to be extremely helpful in identifying gaps in health and safety arrangements and/or risk control, to which the organisation had responded, eg:

- a training programme was devised for supervisors after the CST identified that they were not clear about their role in health and safety issues
- teams were established to review instructions and procedures after the CST helped to identify that these were too technical and not appropriate. Work teams participated in safety-related activities and a sense of pride was created

when simplified procedures were accepted and became a template across the site. These teams also perceived managers as being committed to partnership working to improve safety and also that action was being taken as a result of the CST

- generation of a site-wide 'learning from experience' database, which helped to communicate lessons learned from near misses or other safety-related activities
- commitment to continue communicating organisation responses to issues arising out of the CST
- review of the near-miss reporting system to ensure consistency across the site. Employees were encouraged, in a 'no blame' context, to report near misses and take action as a result. Near misses are now regularly discussed at safety improvement team meetings.

Source: HSE RR 042



2. Implementing a behavioural safety programme

Following two serious accidents, the senior managers of a pallet manufacturing company decided to look for ways to improve its health and safety profile. A behavioural safety programme was initiated in 1997 across its 11 UK sites and the company now reports positive changes in the attitude of shop floor staff and the safety culture.

Owned and largely managed by the workforce, the behavioural safety programme consisted of staff members 'observing' colleagues at work, providing feedback on safe and unsafe behaviour, and discussing improvements with them. The following steps were implemented as part of the initiative:

- a two-day 'observer' training course
- one behavioural observation, per shift, at each location. Categories assessed included personal protective equipment, housekeeping, and plant and equipment, including automated plant
- all observers included in team-building training to improve their communication skills, problem-solving skills and the ability to work together effectively
- goals set, monitored and reviewed for continuous improvement.

This led to the following range of reported benefits:

- greater involvement and ownership from shop floor staff in respect of health and safety issues and the generation of solutions
- a reduction in the number of lost-time injuries. Frequency rates steadily decreased from approximately 44 (per

1,000,000 hours worked) in 1999, to 11.8 in 2003

- an increased understanding and awareness of behaviour and its influence on personal safety
- enhanced staff development – many observers gained a higher level of confidence and IT and communication skills
- increased productivity – the number of lost eight-hour working days fell from 550 in 1999 to 301 in 2003
- an improved public image – observers and managers gave a number of presentations
- an estimated cost saving of £285,000 per year.

Source: HSC case study – www.hse.gov.uk/workers/involvement/businessbenefits/casestudy.htm

The above maturity model can be combined with the principles of total quality management to build a safety culture change process (see Figure 3), based on:

- assessing the current level of maturity
- developing a plan to move to the next level
- implementing the plan
- monitoring the implementation
- re-assessing the level of maturity to evaluate success and identify further actions.

Information from health and safety climate surveys and structured interviews can be used to identify the current level of health and safety maturity, and hence help in selecting an appropriate intervention, eg a health and safety leadership or behaviour modification programme. Guidance on appropriate styles of intervention is contained in 'Changing minds',¹² along with learning points from a number of behavioural initiatives.

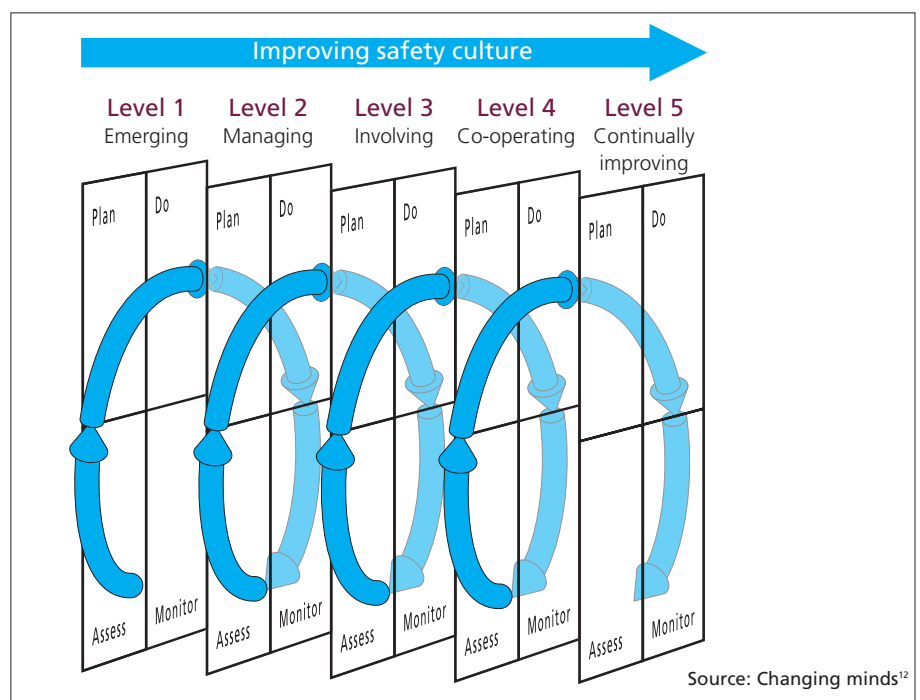


Figure 3 Safety culture change process

3. IOSH guidance

IOSH believes that OSH professionals need to recognise the importance of a good health and safety culture in influencing the health and safety performance of the organisations they advise, and appreciate the characteristics and benefits of a sound health and safety culture (see case studies on page 09 and below). Establishing open reporting of incidents, near misses and concerns, coupled with a culture of 'fair blame', are crucial to achieving a positive culture.

Regular measurement of the health and safety climate of an organisation can yield useful results, allowing resources to be targeted appropriately. Such climate surveys are not a substitute for other performance measures and audits, but are a useful complement.

IOSH recommends that employers should:

- establish what their managers and

employees actually believe about health and safety, and make clear what is expected of them in terms of health and safety values, beliefs, attitudes and practices

- consider the most appropriate interventions to address any differences between corporate expectations and the actual characteristics of the organisation's health and safety culture. The right balance between decree, prescription and 'organisational learning' needs to be identified, and the likely timescale to achieve measurable and permanent change in health and safety culture must be acknowledged
- take account of the influence of health and safety cultural factors when assessing the integrity of their health and safety management arrangements.¹³ This is particularly important when auditing formal OSH management systems – the system may look robust on paper, but it is what actually happens in practice that determines health and safety results.¹⁴



3. Partnership working to improve health and safety culture

In a drive to reduce the number of workplace

injuries, illnesses and unsafe behaviours, a gas utilities group incorporated its health and safety strategy into the overall business management plan. A 'partnership approach' was established in 1998 with employees and safety representatives, and the following steps were implemented:

- monthly staff updates on issues and improvements using photos and videos
- lost-time injuries investigated by a manager and safety representative on the day of the incident, and any lessons learned promptly communicated to staff
- the role and responsibilities of line managers clearly defined and supported through a staff performance review process and safety management training
- a hotline established for staff to ensure incidents and hazards were reported and resolved

- a health and safety agenda on all management meetings and frequent meetings held between safety advisers, safety representatives and managers
- safety representatives involved in joint meetings, communications, training, investigations and inspections
- support of directors through good communication, attendance at management meetings and meeting staff members.

Major expenses invested into the process included £2.5m for a 'safety charity challenge', where donations were made to charity when employees spotted and eliminated workplace hazards. Additional costs of £600,000 were directed at safety management and behaviour training. The health, safety and business benefits observed by the company are:

- an improved safety culture – ownership at all levels, with commitment and competence to improve
- a decreased number of accidents, incidents and injuries by over 80 per cent;

the lost-time injuries reduced from 35.5 per 1,000 staff in 1998 to 6.6 in 2003

- improved incident investigation and procedures established to help prevent recurrence
- increased reporting and resolution of hazards and near misses
- around £4.5m saved over a four-year period through improved lost-time injury rates, including costs from lost production, investigation and civil claims
- developed health and safety leadership skills, transferable to other business performance areas
- a boost to staff morale and pride through the acknowledgement of their performance
- improved reputation with stakeholders.

Source: HSC case study – www.hse.gov.uk/workers/involvement/businessbenefits/casestudy.htm

4. IOSH training

Within its Continuing Professional Development programme, IOSH offers the following courses:

- Introduction to behavioural safety (1 day)
- Developing a behavioural-based safety programme (2 days).

For further information on IOSH courses, please contact Tracey Steans:
tracey.steans@iosh.co.uk
 t +44 (0)116 257 3197.

References

1. Uttal B, 1983, *The corporate culture vultures*, Fortune Magazine, 17 October.
2. Reason J, 1998, *Achieving a safe culture: theory and practice*, Work and Stress, Vol. 12, No. 3, pp 293–306.
3. Guldenmund F W, 2000, *The nature of safety culture: a review of theory and research*, Safety Science, Vol. 34, pp 215–257.
4. Mearns K J and Flin R, 1999, *Assessing the state of organisational safety – culture or climate?*, Current Psychology, Vol. 18, pp 5–17.
5. Mearns K, Flin R, Gordon R and Fleming M, 1998, *Measuring safety climate on offshore installations*, Work and Stress, Vol. 12, No. 3, pp 238–254.
6. Lee T, 1998, *Assessment of safety culture at a nuclear reprocessing plant*, Work and Stress, Vol. 12, No. 3, pp 217–237.
7. Health and Safety Executive, 2001, *Health and Safety Climate Survey Tool – information pack*, Misc 097, HSE Books, Sudbury.
8. Constructing Excellence, 2003, *Respect for People Health and Safety Toolkit*, Department of Trade and Industry, available from: www.constructingexcellence.org.uk/resourcecentre/peoplezone/details/toolkit.jsp?toolkitID=109.
9. Fleming M and Lardner R, 2001, *Behaviour modification programmes*

establishing best practice, OTO 2000-048, HSE Books, Sudbury.

10. Fleming M, 2001, *Safety Culture Maturity Model*, OTO 2000-049, HSE Books, Sudbury.

11. Health and Safety Executive, 2002, *Evaluating the effectiveness of the Health and Safety Executive's Health and Safety Climate Survey Tool*, RR042, HSE Books, Sudbury.

12. Step Change, 2000, *Changing minds – a practical guide for behavioural change in the oil and gas industry*, free from www.stepchangeinsafety.net (user id and password required).

13. BSI, 2004, *Occupational health and safety management systems – Guide (Annex C)*, BS 8800: 2004, British Standards Institute, London.

14. IOSH, 2003, *Systems in focus – guidance on occupational safety and health management systems*, Wigston, www.iosh.co.uk/index.cfm?go=technical.all.

Further reading

- Geller S E, 2000, *The psychology of safety handbook*, CRC Press, Virginia, USA.
- Health and Safety Executive, 1999, *Reducing error and influencing behaviour*, HSG48, HSE Books, Sudbury.
- Health and Safety Executive, 2000, *Successful health and safety management*, HSG65, HSE Books, Sudbury.
- Health and Safety Executive, 2002, *Strategies to promote safe behaviour as part of a health and safety management system*, CRR 430/2002, HSE Books, Sudbury, www.hse.gov.uk/research/crr_pdf/2002/crr02430.pdf.
- IOSH, 1999, *Behavioural safety: kicking bad habits*, IOSH, Wigston, www.iosh.co.uk/index.cfm?go=technical.all.
- Reason J, 1997, *Managing the risks of organizational accidents*, Ashgate, Aldershot.

IOSH

The Grange
Highfield Drive
Wigston
Leicestershire
LE18 1NN
UK

t +44 (0)116 257 3100
f +44 (0)116 257 3101
www.iosh.co.uk

IOSH is Europe's leading body for health and safety professionals, representing over 27,000 members. Principally a UK-based organisation, it also has an expanding international membership, with members in over 50 countries.

IOSH, a chartered body, is the guardian of health and safety professional competence. As an independent, not-for-profit organisation, the Institution regulates and steers the profession, maintaining standards and providing impartial, authoritative guidance on health and safety issues.

Institution of Occupational
Safety and Health
Founded 1945
Incorporated by Royal Charter 2003
A registered charity

