

Section 0

Introduction to the **CECA Health Management Toolkit**

Introduction to the Health Management Toolkit

Ill health problems at work

Occupational ill health affects large numbers of construction operatives in the UK each year. Ill health can have an effect on people's ability to work and on their general health and well-being. Unfortunately, in the more serious cases of occupational ill health, permanent disability and a slow death can result.

Despite the dire consequences of occupational health problems, there is little management of ill health within the industry sector, possibly due to the delay between exposure to hazardous materials and activities and the onset of health problems.

Ill health kills and maims large numbers of construction operatives. Every year many thousands of construction workers suffer from work-related ill health. This is due to exposure to hazardous substances used such as asbestos, silica and cement, as well as exposure to manual handling activities, and noise and vibration in the working environment. Recent data illustrate these hazards; the UK's self-reported work-related illness survey found an estimated 134,000 construction-related workers report a health problem caused by their work, resulting in an estimated 1.2 million days lost in a workforce of 1.5 million¹. In particular there were 96,000 cases of musculoskeletal disorders; 15,000 cases of respiratory disease; 6,000 cases of skin disease and 5,000 cases of noise induced hearing loss. Hand arm vibration syndrome (HAVS) has also been identified as a health hazard as shown by recent research¹.

Toolkit development

As part of their Health and Safety Action Plan and Strategy, the Civil Engineering Contractors Association (CECA) has worked with Loughborough University to develop some simple management strategies for reducing the incidence of ill health amongst employees and sub-contractors. Every effort has been taken to align the project with other ongoing work on managing occupational health undertaken by other industry bodies, such as CONIAC.

The Toolkit is designed to be suitable for use in any contracting company, and is freely available as a resource to all those who could benefit in UK construction.

In order to design the content of the Toolkit, a series of 25 detailed interviews were undertaken with civil engineering company directors/health and safety managers to examine current health management practice and barriers to such systems. These interviews were also used to investigate the management support of particular suggestions for future application with health management and to gain a general consensus. A participative approach was used to develop these suggestions into a Toolkit of best practice for managing occupational ill

¹ Gibb, A G F (2002), Health, Safety's Poor Cousin – Keynote presentation, *CIB W99 Triennial International Conference*. Hong Kong, May 2002, awaiting publication by Spon, Rowlinson, S (ed).

health, including the design of health related Key Performance Indicators from the health questionnaires, educational aids, and basic health monitoring processes.

Dialogue with health and safety management yielded useful feedback. After management interviews with contractors both large and small, 5 key health issues were identified as the main ill health effects within the civil engineering sector:

- hand arm vibration syndrome (HAVS)
- muscular problems
- dermatitis and hand injuries
- noise induced deafness
- respiratory problems

There were a range of pro-health activities happening, with differing uptake and awareness amongst the sector. Having considered the themes that emerged from the management consultation stage, and after reflection on information from other federations, it is proposed that the components below should be contained in the health management Toolkit, further explained in Table 1. These components have been categorised into a series of steps to improve ill health and it is hoped that organisations will use the components as required.

Potential benefits of the Toolkit

The principal benefit of the Toolkit would be the establishment of meaningful occupational ill health management arrangements for construction contractors. This would directly address one of the most difficult implementation issues facing the construction industry's Revitalising Health and Safety in Construction programme. This ultimately would help drive the industry's targets on reducing ill health amongst its workforce. The active management of health issues features heavily in the agendas of all the construction umbrella organisations, and in key initiatives, such as Accelerating Change and Rethinking Construction. Improving health and safety conditions in construction are also an essential component in helping to solve the industry's retention and recruitment problems. Another potential benefit would be the reduction of Employers Liability Insurance premiums for contractors adopting the developed approach.

General information

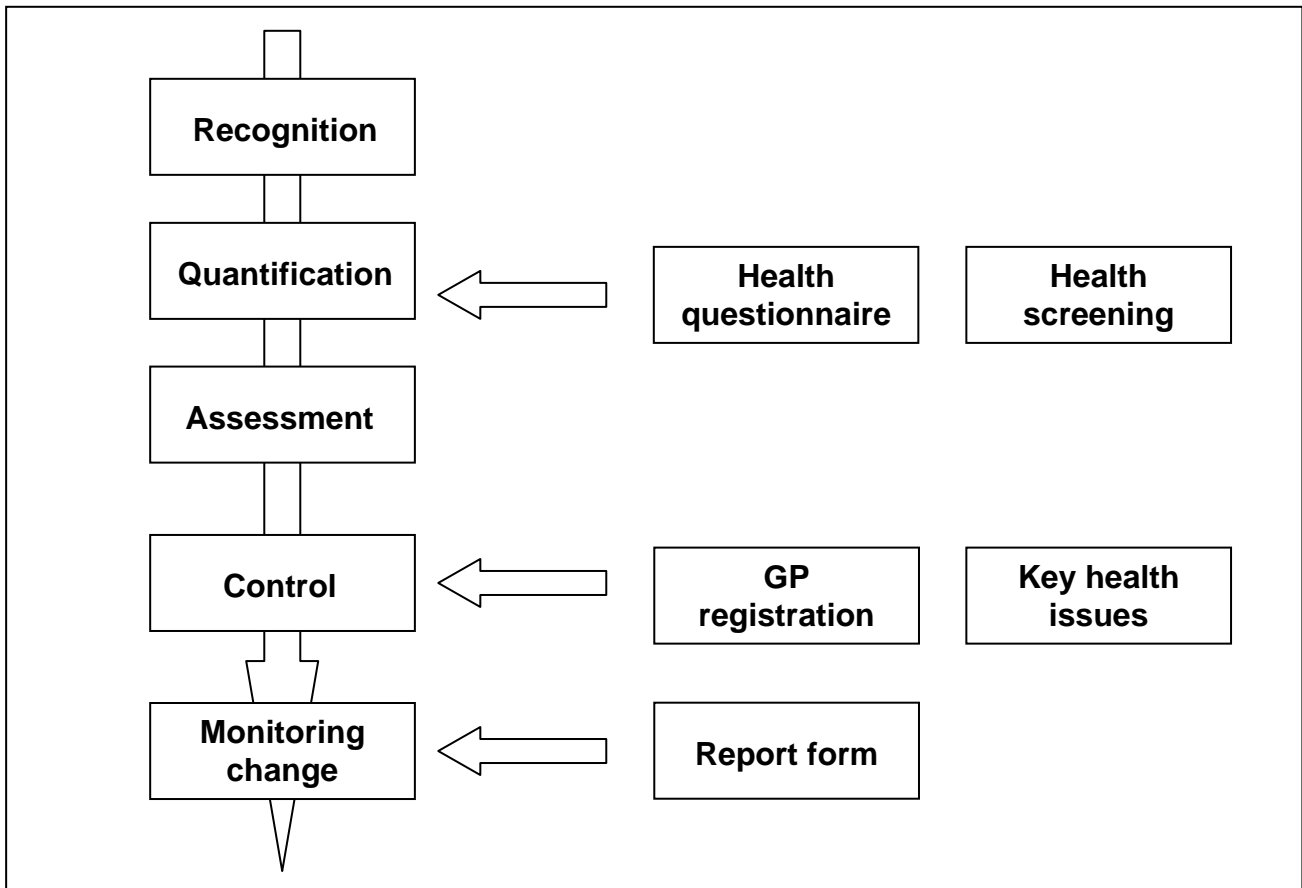
The Toolkit is available to download from www.ceca.co.uk

Occupational Health

Occupational health anticipates and prevents health problems which are caused by the work which people do. In some circumstances, the work may aggravate a pre-existing medical condition, and stopping this is also the role of occupational health. Health hazards often reveal their effects on the body only after the passage of time; many have cumulative effects and in some cases the way this happens is still not fully understood. Because the effects are often not immediately apparent it can be difficult to understand and persuade others that there is a need for caution and control. Good occupational health practice encompasses the following ideas:

- **Recognition** of the hazards or potential hazards
- **Quantification** of the extent of the hazard - usually by measuring physical and chemical factors and their duration, and relating them to known or required standards
- **Assessment** of risk in the actual conditions of use, storage, transport and disposal
- **Control** of exposure to the hazard, through design, engineering, working systems, the use of personal protective equipment and biological monitoring
- **Monitoring change** in the hazard by means of audits or other measurements techniques, including periodic re-evaluation of work conditions and systems

From Principles of Health and Safety at Work by **Alan St John Holt**



Components of the Health Management Toolkit

Component	Details	Output	Reference
Introduction to the Health Management Toolkit	Background to the development, use and importance of the Health Management Toolkit. Scope of occupational health practice. Process diagram for the toolkit.	- Information sheet	0
Health Definitions	Defines general health and occupational health.	- Information sheet	0
Behavioural Change and Worker Engagement (BCWE)	Describes how behavioural change can deliver increased safety on construction sites and the importance of worker engagement in achieving improvement	- Information sheet	0
Designing out Risks	Describes how consideration and elimination or reduction of potential hazards in the pre-construction phase of projects can minimise effects on workers health on site as well as reducing the likelihood of accidents	- Information sheet	0
Information on Drugs and Alcohol	Includes Health and Safety Executive statement; signpost to CECA document and minimum requirements.	- Information sheet	0
Information on Stress	Includes Health and Safety Executive statement and reported prevalence of stress in the construction industry.	- Information sheet	0
Information on Eye Problems	Includes background to eye problems in civil engineering work and a case study.	- Information sheet	0
Step 1			
Information on Step 1: Ill Health Report Form	Information sheet for management/supervisors, trade union and employee safety representatives on the background to the use of the Ill Health Report Form.	- Information sheet	1.0
Ill Health Report Form Instructions	Instructions for completion of the form.	- Information sheets	1.1
Ill Health Report Form Cover Sheet	Contains information on who to return completed forms on site.	- Information sheet	1.2
Ill Health Report Form	Similar to a Site Accident Book, this proforma should be completed after an employee has reported an episode of ill health, whether the problem results in periods of time off work or a case of mild discomfort.	- Proforma	1.3
Toolbox Talk on Ill Health Report Forms	This educational aid is provided for managers/supervisors, trade union and employee safety representatives to inform the workforce about the importance of completing Ill Health Report Forms (Document Reference 1.3)	- TBT for operatives	1.4

Crib sheet for Toolbox Talk on Ill Health Report Forms	For use by managers/supervisors, trade union and employee safety representatives when conducting Tool box talk.	- Information sheet	1.5
Ill Health Report Form: Documentation Record	Used by managers/supervisors to briefly document what they have done about any reported health issues arising from Ill Health Report Forms (Document Reference 1.3) in order to record actions taken and for future reference.	- Proforma	1.6
Ill Health Report Form: Monthly Summary	Completed by managers/supervisors to briefly summarise the frequency and the types of health issues that have been reported by the workforce, which is sent back to CECA so that current problems in the industry can be monitored.	- Proforma	1.7
Step 2			
Information on Step 2: Employee Health Questionnaire	Information sheet for managers/supervisors, trade union and employee safety representatives on the background to the use of the Employee Health Questionnaire.	- Information sheet	2.0
How To Use The Employee Health Questionnaire	Information on when and why to use the questionnaire and what to do with the responses.	- Information sheet	2.1
Employee Health Questionnaire	Questions are asked about the general health of the employee, for the records of the organisation. This information may need to be kept within the organisation for up to 50 years or more. (Information will be provided on the best ways of doing this.) This information must be kept confidential	- Proforma	2.2
Employee Health Questionnaire: Documentation Record	Used by managers/supervisors to briefly document what has been done about any reported health issues arising from Employee Health Questionnaire (Document Reference 2.2) in order to record actions taken and for future reference.	- Proforma	2.3
Employee Health Questionnaire: Monthly Summary	Completed by managers/supervisors to briefly summarise the types of health issues that have been reported by your workforce, which is sent back to CECA so that current problems in the industry can be monitored.	- Proforma	2.4
Step 3			
Information on Step 3: The GP Registration Process	Information sheet for managers/supervisors, trade union and employee safety representatives on the background to the use of General Practitioners services.	- Information sheet	3.0
Frequently Asked Questions About Registering With A GP	Information for use by managers/supervisors, trade union and employee safety representatives to respond to operatives' queries.	- Information sheet	3.1
Tool Box Talk About Registering With A GP	This educational aid is provided for managers/supervisors, trade union and employee safety representatives to inform the workforce about why and how they should register with a GP.	- TBT for operatives	3.2

Tool Box Talk Crib Sheet	For use by managers/supervisors, trade union and employee safety representatives when conducting Tool box talk.	- Information sheet	3.3
Information Letter To GPs	Proforma letter to be personalised and sent from the organisation (supervisors/management) to local GP practices where the workforce are or just about to register. This letter is designed to raise awareness about occupational health issues among GPs.	- Proforma	3.4
Step 4			
Information on Step 4: Health Hazards	Background to the use of the Health Hazard Information Sheets, Tool box talks and Self Health Checks.	- Information sheet	4.0
Information On Key Health Issues	<p>Educational documents for managers/supervisors trade union and employee safety representatives to highlight the key issues and latest facts and figures on:</p> <ul style="list-style-type: none"> Hand arm vibration Muscular problems, e.g. back ache, manual handling Dermatitis and hand injuries Noise and hearing loss Respiratory problems <p>The above include examples of behavioural change and worker engagement (BCWE) approach.</p> <p>Having studied these, managers/supervisors will be able to perform the TBTs (Ref 4.2-4.6) for site operatives. The TBTs also cover preventative measures e.g. PPE, job design, specialised tools/equipment.</p> <p>Records of attendance at TBTs need to be kept for company records (Ref 4.12).</p>	- Information sheet	4.1
Toolbox Talks On Key Health Issues	TBTs for managers/supervisors, trade union and employee safety representatives to use with operatives to educate them on key health issues.	- Tool box talks - BCWE guidance	4.2-4.6

Self-Health Checks For Key Health Issues	<p>A self administered health checklist for uncovering symptoms will be completed by site operatives. The responses should be examined by the relevant supervisor or the organisation's health professional(s). If an operative reports a positive response, they should either visit the site health professional (if applicable), or their GP, for further examination.</p> <p>Areas for assessment include:</p> <ul style="list-style-type: none"> Hand arm vibration Muscular problems, e.g. back ache, manual handling Dermatitis and hand injuries Noise and hearing loss Respiratory problems <p>- This checklist is to be carried out by every new employee on the day that they start a job - This checklist is to be carried out annually for each operative on site after the relevant TBT has been conducted by a supervisor/manager - Responses should be kept confidential and information will describe how to store this information</p>	- Proformas	4.7-4.11
TBT Attendance Sheet	Records of attendance at TBTs will be kept so that an organisation knows who is being educated in the issues. Reasons for non-attendance should also be disclosed so that the company knows, for future reference, if the employee could not or did not attend etc.	- Proforma	4.12
Step 5			
Information On Health Screening	This information will be for managers/supervisors, trade union and employee safety representatives who may be thinking about health screening for their workforce. It will describe what health screening is all about. It will highlight the types of medical screening that are available from health care providers and the approximate costs involved. Contact details of health care providers will also be supplied.	- Information sheet	5.0
Constructing Better Health	Details of the Constructing Better Health pilot programme and continuing work on occupational health in the construction industry. Includes a matrix of civil engineering operatives and levels of risk associated with key health issues.	-Information sheet	5.1

General Health

Definitions

Health

Health is defined in the Preamble of the Constitution of the WHO as *a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*. In 1978, WHO-EURO (Copenhagen) referred to health as a dynamic process which depends largely on the individual capacity to adapt to the environment; to be healthy means to maintain an intellectual and social activity despite any disorders or handicaps.

Occupational health

Occupational health should aim at: the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention amongst workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological capabilities; and, to summarize, the adaptation of work to man and of each man to his job.

General health issues are particularly relevant for an industry such as the construction industry where there are skills shortages and a need to keep skilled operatives at work. Employers are, therefore, unlikely to draw a clear distinction between work-related and other health problems.

Finally, some jobs in construction (e.g. crane operation) can be safety critical precisely because of failures in general health. Suffering a heart attack, for example, whilst operating machinery could cause fatalities. Therefore detecting indicators such as high blood pressure are important in an occupational sense, as well as providing information on general health.

Despite this, it is important to have a clear distinction between ill-health which is caused or made worse by work and general health issues which may or may not be work-related. An employer's responsibility to their staff extends to managing risk and ensuring that members of staff are fit for work. Basically an employer needs to minimise the extent to which individual workers are put at risk as a result of their work.

General health issues are slightly different. If an employer is aware of a general health condition which affects the individual's ability to work safely, then there is a responsibility to protect the safety of all workers from any potential harm that may result. However, an employer is not expected to manage an employee's lifestyle or out-of-work activities.

Approximately one-third of those participating in the Constructing Better Health pilot were found to have some form of occupational health issues, predominantly caused by noise exposure, with some vibration issues. Also, one-third of those participating were found to have general health issues, predominantly related to blood pressure, respiratory and blood, protein and/or sugar in urine. Individuals may have experienced either type of problem or both.

General health screening is non-statutory, periodic monitoring of an employee's health and may include administration of a general health questionnaire and measurements of height, weight, body mass index, blood pressure and testing urine (urinalysis). It can help to identify lifestyle factors in time to prevent the onset of disease, so encouraging good health and reducing ill-health absence

Individuals who are identified, through health screening, as having an occupational health issue should be counselled by the Occupational Health Nurse/Technician and then referred on to an Occupational Physician if appropriate. For general health issues individuals should be referred directly to their own GP.

Behaviour Change and Worker Engagement (BCWE)

Achieving Behavioural Change (HSE)

Achieving behavioural change is vital to preventing accidents and for helping you and your workforce improve standards and work smarter on site. It need not cost much to do.

According to the contemporary evidence base, behaviour change can arise from any intervention that affects risk taking/protective behaviour through either targeting the individual directly, or the social and physical aspects of their work environment. The same processes can apply not just to health and safety issues but to other topics such as quality management, environment and performance management. Individuals can correspond to an operative or a manager. In effect, by altering management behaviour, organisational behaviour is changed.

Worker engagement refers to the amount of input workers have in decisions that affect their health and safety. Both worker engagement and behaviour change have been demonstrated as highly interdependent. Behaviour change requires worker engagement both in the identification of issues, and production of workable solutions. Worker engagement also serves to motivate the workforce.

However, it is not enough to assume that simply involving workers in decisions is enough to secure change. Behaviour transformation also requires: focussed attention upon modifying the latent and immediate contributors to unsafe behaviour; modifying their consequences where appropriate and; strategies for reinforcing change over time. In other words behaviour change requires integration with the wider performance management system.

Behaviour-based approach to health and safety

Research at the University of Manchester Institute of Science and Technology (UMIST), has shown that a behaviour-based approach to health and safety management can be an effective tool for increasing safety on construction sites and elsewhere, despite some practical problems of implementation. The technique involves sampling, recording and publicising the percentage of safe (versus unsafe) behaviours, as noted by specially trained observers drawn from workforce and management. This gives more data on potential system and individual failures that could be obtained from a study of accident records. The attraction of the technique is that it offers measurement of potential for harm, independent of the accident

record. Disadvantages may include the need to achieve an altered safety climate inside management and workforce to adopt the techniques, and employees' suspicion of hidden motives for the observations.

(from HSE Research Report RR 660: <http://www.hse.gov.uk/research/rrhtm/rr660.htm>)

Designing out Risks

One of the best ways to prevent and control occupational injuries, illnesses, and fatalities is to "design out" or minimize hazards and risks early in the design process. The National Institute for Occupational Safety and Health in the United States is leading a national initiative called Prevention through Design (PtD) to promote this concept and highlight its importance in all business decisions.

The concept of PtD can be defined as:

Addressing occupational safety and health needs in the design process to prevent or minimize the work-related hazards and risks associated with the construction, manufacture, use, maintenance, and disposal of facilities, materials, and equipment.

The Health and Safety Executive guidance for designers under the Construction Design and Management Regulations 2007 state that -

- Designers have to:
 - Ensure clients are aware of their duties
 - Make sure they (the designer) are competent for the work they do
 - Co-ordinate their work with others as necessary to manage risk
 - Co-operate with CDM co-ordinator and others
 - Provide information for the health and safety file
- Designers have to avoid foreseeable risks so far as is reasonably possible by:
 - Eliminating hazards from the construction, cleaning, maintenance, proposed use (workplace only) and demolition of a structure
 - Reducing risks from any remaining hazard
 - Giving collective risk reduction measures priority over individual measures
- Designers must also:
 - Take account of the Workplace (Health, Safety & Welfare) Regulations 1992 when designing a workplace structure
 - Provide information with the design to assist clients, other designers, & contractors
 - In particular – inform others of significant or unusual/ “not obvious” residual risks
 - Be given relevant information by the CDM co-ordinator
- Designers do not need to
 - consider risks which are not foreseeable
 - design to “zero risk”
 - use undue effort to eliminate hazards which should be proportionate to the risk

Health and Safety Executive Guidance on Occupational Health

The Health and Safety Executive (HSE) website for Construction Occupational Health Management Essentials (COHME) gives guidance using a five stage risk assessment (Arrangements, Assess, Eliminate, Control and Manage). This is applied to construction related health risks emphasising the need to **eliminate** risks, where possible, as a priority. This should be carried out before considering **control** measures such as reducing the impact of the risk or to **manage** the risk, for instance, by the use of personal protective equipment. <http://www.hse.gov.uk/construction/healthrisks/risks.htm>

Notes on Other Health Issues

Drugs and Alcohol

Drugs and alcohol (HSE)

People should not do construction work if they are under the influence of drugs or alcohol.

Drug and alcohol testing is a complex area. If you decide to carry out testing, you will need to consult health and safety representatives and employees about the company position and procedures. Employees need to give informed consent before a blood or urine sample is taken.

The CECA document “*Drugs & Alcohol at Work: Guidance for Employers*” has been prepared to provide a basic understanding of the signs, effects and risks of drug and alcohol misuse. It also sets out a best practice approach to dealing with drug and alcohol related problems at work. A copy of the document is available for downloading in the Members Area of the CECA website at www.ceca.co.uk.

Problems present at the workplace relate not just to consumption at or before work or to intoxication at work. The indirect effects of alcohol and drug problems on individuals’ functioning within the workplace can also be severe.

A workplace policy applying to all staff can benefit all organisations and should form part of the overall health and safety package. The alcohol and drug policy that you adopt will need to take account of the particular needs and the practical situation of your company. However, there are a number of minimum requirements for such a policy, which must:

- Contain a clear statement of the behaviour that is expected of employees.
- Apply equally to all employees, including managers and supervisors, at the workplace.
- Be part of your comprehensive health and safety policy.
- Result from adequate consultation with your employees before it is adopted.
- Be made known to all employees.
- Address issues in the work environment that increase the use of alcohol or drugs.
- To the greatest possible degree, be non punitive.
- State the conduct likely to result in action under the discipline.
- Provide for appropriate treatment and rehabilitation for employees with problems.

- Be evaluated, after implementation and amended, if necessary, in line with the outcome of the evaluation

Stress

What is stress? (HSE)

HSE defines stress as ‘an adverse reaction to excessive pressure’. Pressure is often part and parcel of work and helps to keep people motivated. Excess, badly-managed exposure to pressure can lead to stress. Workers who experience stress, anxiety or depression are unlikely to perform effectively. This can be costly to employers and in safety-critical industries such as construction it can have serious consequences.

<http://www.hse.gov.uk/construction/healthrisks/stress.htm>

An analysis of the prevalence and distribution of stress in the construction industry (HSE Report RR518) <http://www.hse.gov.uk/research/rrhtm/rr518.htm>

1. What is the extent of work-related stress?

Around 5% of those working in the sampled construction industry job roles are currently experiencing stress, depression or anxiety which they feel was caused by or made worse by their job or work done in the past. For comparison, 8% of the sample reported bone, joint or muscle problems.

Around 10% of the sample found their job very or extremely stressful.

2. What is causing stress?

The ‘top five’ most stressful aspects of work for respondents were:

- Having too much work to do in the time available
- Travelling or commuting
- Being responsible for the safety of others at work
- Working long hours
- Having a dangerous job

3. Who is most stressed?

In the present sample, management grade employees, along with road maintenance staff, designers and administration staff report more stress than other job roles, primarily construction labourers/operatives.

4. What can be done?

The findings suggest that work-related stress is an occupational health issue for the construction industry. HSE may wish to consider tackling stress along with other occupational health priorities, particularly with management grades. Ideas for tackling stress are summarised within the report.

Strategic interventions suggested by stakeholders

- Provide industry-specific case studies to demonstrate what stress is and how it can be tackled in a simple manner, along with best practice examples (e.g. similar to the 'Real People, Real Solutions' information).
- Develop and share examples of the business case for tackling work-related stress.
- Provide employees with a formal dedicated stress 'helpline', or Employee Assistance Programmes they can call to discuss work-related stress.
- Consider whether goal-setting schemes that focus on reducing accidents on sites can also be used to address health issues.
- Consider proactive health checks to help identify work-related stress problems and solutions.
- Include the requirement for contractors to have robust occupational health management in tenders.

Workload interventions suggested by stakeholders

- Organisations may like to consider how they can help managers manage their workload, e.g. through training on time management. Training workforces on more than one skill may also help organisations be more flexible in their use of resources, relieving pressure as demands change.
- Consider systems that allow for working long hours during periods of high demand but then allow time off in lieu when demands are less.
- Regarding travelling and commuting, consider providing services, such as dedicated bus services, to get workers to site on larger projects. For management roles that require individuals to travel on their own or at different times to a number of sites, use of technology such as mobile phones and wireless internet connections may help to reduce the need to visit sites or help solve some problems from a distance.

Other interventions suggested by stakeholders

- Encourage all workers to be responsible for their own health and safety, and not assume it is solely a management responsibility. This could relieve some of the pressure on managers.
- Encourage greater communication within organisations. For example, use a 'suggestion box' scheme and ensure suggestions are acted on.

Eyesight

Poor eyesight is one of the health conditions that can affect the ability of a worker to do their job safely, or their ability to do their job without affecting the safety of others.

It is important to consider both the

- nature of the illness, and
- the affect this could have on the job the worker will do

before making a judgment about the suitability of a worker for a particular task.

The following are examples of tasks which may be affected by a workers ability to see correctly:

- Poor eyesight for jobs which include driving; controlling machinery such as cranes or working as a banksman; crossing high speed roads;
- Colour blindness for jobs which involve looking for visual signals or alarms;

It is important to remember that if this health condition is properly under control, the person will be capable of doing most of the jobs in construction safely. Where you have concerns about a particular illness and its possible effect on the worker's ability to do the job, you should seek advice from the worker's GP or from your occupational health advisor. Guidance on getting expert advice can be found in Section 5 of this toolkit.

Workers with disabilities are protected from discrimination at work by the Disability Discrimination Act, and further information about this can be found on the Health and Safety Executive's website in the 'Employments rights' section.

<http://www.hse.gov.uk/workers/index.htm>

Example:

A worker reported for work on site as a dumper truck driver. The company had identified dumper driving as a safety critical job because drivers with poor eyesight could put other site workers at risk. So before allowing him to start work, he was given a simple eyesight test. The foremen discovered that even though he did not wear glasses, his eyesight was poor and he had never had a proper eye test. The foreman explained to the worker that he could not start on site until he had visited an optician to see if he needed glasses. A few days later the worker returned to the site wearing glasses, and he was given a job straight away. He later commented that he never realised that his eyesight had become so poor, and that the glasses had made a huge difference to his quality of life.