Occupational Health Standards for the

UK Construction Industry

Part Two: Standards for Occupational Health
Service Providers working within the
Construction Industry
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FOREWORD

Occupational health is widely referred to as being about assessing and advising on the effect work might have on an employee’s health, and what effect an employee’s health might have on his/her work.

The British Medical Association (BMA) believes that the purpose of an occupational health service includes; to

- promote, protect and maintain the health, safety and welfare of people at work
- advise on the rehabilitation and placement in suitable work of those temporarily or permanently incapacitated by illness or injury
- advise on the provision of safe and healthy conditions by informed assessment of the physical and psychological aspects of the working environment
- carry out or promote research into the causes of occupational diseases and injury and into the means of their prevention

Whilst Occupational Health professionals will be familiar with the benefits of this, the Construction Industry however is a sector populated by small businesses, managed through complex contractual chains - in many cases by a small number of larger contracting entities, and large numbers of mobile workers, meaning that all but the largest employers may not recognise the potential benefits of investing in taking greater care of the long term health of the workforce.

Construction workers have one of the highest prevalence of work related illness of all occupational groups. An estimated 1.8 million working days (2006/07) are lost due to an illness caused or made worse by a current or most recent job in construction. A further 0.9 million days are lost due to workplace injury.
PURPOSE, SCOPE AND APPLICATION OF THE CBH STANDARDS

PURPOSE

The purpose of the CBH OH Standards is to set a benchmark for Occupational Health Service Providers working within the Construction industry, and to provide guidance on clinical information.

The standards will also act as a point of reference within the CBH Registration programme.

SCOPE OF THE DOCUMENT

- The Standards outline the clinical operational practices for deliverers of work related health surveillance, fitness for task assessments for safety critical workers and general health assessments.
- The Standards do not address risk prevention and control measures.

APPLICATION

The CBH standards may be applied to Occupational Health provision in all industry sectors, but are aimed specifically at those providing a service to the Construction industry.
INTRODUCTION TO THE CBH STANDARDS

BACKGROUND

Having completed a £1million pilot funded by industry, government and trade unions, CBH identified that construction industry employers are uncertain as to exactly who, when and how occupational health management should be provided. This is compounded by the complexity of the supply chain; the transience and mobility of the workforce; and approximately half of the workforce working in companies employing 5 or less.

The pilot also highlighted inconsistency and a lack of co-ordination in the approach to the management of occupational health within the industry, with few employers having robust occupational health policies and procedures in place. It also identified inconsistency in the way in which data relating to workplace health was collected, reported and transmitted.

With this knowledge, and the support of trade bodies, government representatives, contractors, SME’s and the supply chain, CBH has been set up to address the issues identified and to deliver a national, industry-wide scheme with the aim of improving productivity and workers’ health by helping employers to satisfy legislative needs and raising awareness of issues that affect their work related health.

WHY SET STANDARDS FOR OCCUPATIONAL HEALTH?

In order to assist the Construction Industry with ensuring any Occupational Health Service Provider (OHSP) they contract with has the necessary understanding of the complexity of the industry and is able to meet their requirements, CBH has developed a Registration scheme.

Any OHSP wishing to deliver an OH service to the construction industry is encouraged to become registered with CBH. The list of registered OHSPs will be freely available for the Construction Industry Employers, enabling them to make an informed choice in the knowledge that the OHSP meets the competencies set.

These standards form the benchmark for ‘OHSP Registration’ and guidance to the delivery of best practice. This guidance also aims to facilitate an efficient, effective and accurate method of health assessment that is consistent across the Construction Industry.

For the purpose of these standards ‘OHSP’ refers to an organisation that provides OH services, an in-house OH service, an independent OH Nurse Advisor or OH
Physician, or a practitioner working on behalf of any of the above or solely. A construction company employing in-house OH services to deliver health surveillance and fitness for task health checks for safety critical workers (SCW) will also have the opportunity to register with CBH for access to information and/or guidance; however their application will be processed according to their commercial availability, i.e. they may not be included in the list of available OHSPs for other construction industry Employers.

**REGISTRATION WITH CBH**

The purpose of an OHSP registering with CBH is to provide reassurance to the construction industry that the OHSP meets the CBH occupational health standards. As part of the registration process an OHSP's services and operations will be reviewed to ensure they meet the required competencies

**WHY SHOULD AN OHSP BECOME REGISTERED?**

The benefits for an OHSP of becoming registered with CBH include:

- Gateway to the construction industry
- Access to professional advice and resources
- Access to research / reports
- Access to discounted training courses for CPD
- Access to on-line best practice & management tools
- Networking opportunities
- Access to previous health data for monitoring
- Access to independent registered OHA's for additional resources
- Input to future strategy for OH in construction
- Web-links / advertising products & services

**CBH VISION STATEMENT AND OBJECTIVES**

“To improve the work-place health and well-being of the construction industry workforce”

**CBH’S COMMITMENT TO THE INDUSTRY IS TO:**

- Set the industry standards for consistent management of workplace health, including standards not only for work-related health assessments for fitness to
work, but also the quality and competencies of occupational health service providers.

- Administer an industry database providing valid, reliable data for improving the risk management of work-place health.

- Provide fitness for task information and health surveillance outcomes to all construction sectors via a workplace card scheme, (Construction Skills Certification Scheme (CSCS)) [www.cscs.uk.com](http://www.cscs.uk.com)

- Administer an industry-wide workplace health knowledge platform incorporating education and awareness raising tools, access to advice and guidance, signposting and referral routes to expert assistance and validated research data.
DEFINITIONS AND GLOSSARY

**APPOINTED DOCTOR** is a registered practitioner who is appointed, in writing, by the Health and Safety Executive (HSE) for the purpose of the Regulation.

**AUDIOMETRY** is a specific procedure by which the threshold of hearing is measured.

**HEALTH MONITORING** is about monitoring an individual’s health for signs or symptoms that may be related to the work being undertaken, but where there is no specific test to detect the onset of a recognised disease, and recording those findings.

**HEALTH SURVEILLANCE** is a process involving a range of strategies and techniques used to detect signs or symptoms of work-related ill-health where:

- there is a valid way to detect a disease or condition;
- it is reasonably likely that damage to health will occur under the particular conditions at work;
- and health surveillance is likely to benefit the employee, thus enabling steps to be taken to eliminate, or reduce, the probability of further damage

**OCCUPATIONAL HEALTH NURSE ADVISOR (OHA/OHNA)** a nurse registered on part 1 of the register and also as a Specialist Community Public Health Nurse - OH

**OCCUPATIONAL HEALTH PHYSICIAN (OHP)** is a doctor, with specialist training and qualifications, who in relation to any particular workplace takes full clinical responsibility for advising management and the workforce on all health matters connected, directly or indirectly, with their employment. (FOM)

**OCCUPATIONAL HEALTH SERVICE PROVIDER (OHSP)** An organisation or suitably qualified individual contracted to deliver occupational health services.

**RESPONSIBLE PERSON** A ‘responsible person’ is an employee who has had specific training in the recognition of symptoms of work related ill health, which may require referral to a health professional. The responsible person must not make a diagnosis and must keep any records confidential.

**RISK** means the combination of the frequency or probability of occurrence and the consequences of a specified hazardous event.

**RISK ASSESSMENT** means the overall risk analysis and risk evaluation through a process of assessment.
SAFETY CRITICAL WORKER (SCW) “Where the ill health of an individual may compromise their ability to undertake a task defined as safety critical, thereby posing a significant risk to the health and safety of others”

SPIROMETRY measures how much and how quickly air can be expelled following a deep breath.
**OCCUPATIONAL HEALTH: GENERAL PRINCIPLES**

**ORGANISATIONAL**

OHSPs should have appropriate business arrangements and internal policies in place; they should be able to demonstrate their own commitment to the health, safety and well being of their employees.

The OHSP should be able to demonstrate their Quality Management System; this refers to an organisation's actions to ensure that its products or services satisfy its customers' quality requirements and comply with any regulations applicable to those products or services, and how they assess their service’s performance by quality and audit processes.

The OHSP should retain its own internal standards, maintaining the highest levels of clinical practice and administrative standards. They should maintain and monitor an effective complaints procedure, including the investigation of any complaints.

The OHSP should provide clear written contracts with any purchasers of services, including information about the nature and extent of the service provided and should specify any that are not. They should ensure that the service is provided by individuals who have appropriate knowledge, skills, qualifications, experience, training and competency.

When tendering for contracts the OHSP should in no way damage the professional, personal or business reputation of other OHSPs. Any intellectual property of the client should be protected at all times.

The OHSP should have suitable business insurances, such as Employer Liability or Indemnity Insurance and where appropriate Directors Vicarious Liability.

All OHSPs should work within their relevant codes of practice, i.e. for nurses 'The NMC code of professional conduct: standards for conduct, performance and ethics' (the Code), and for doctors the General Medical Council advises that one core piece of guidance is ‘Good Medical Practice (2006)’, as well as other supplementary ethical guidance.

**PREMISES**

An OHSP requires suitable premises from which to practice, including facilities for the safe and secure storage of records.
All equipment should be in a good working condition, with accurate records of calibration. Processes should be in place for the maintenance of such records.

**PERSONNEL**

An OHSP should comply with all regulatory requirements and make certain that all personnel are suitably qualified and competent to undertake the work allotted to them. It is especially important that they understand the complexities of working within the construction industry, about the supply chain as well as an in-depth knowledge of the typical risks and hazards to which workers may be exposed. Checks should be made to ensure that Doctors are licensed to practice with the General Medical Council (GMC) and Nurses registered with the Nursing and Midwifery Council (NMC). All personnel should work to the professional standards set out in the regulatory bodies as detailed above.

Non-clinical personnel should be aware of confidentiality issues and sign a confidentiality agreement.

The OHSP should arrange education and training to ensure that occupational health staff can demonstrate the required skills and knowledge base appropriate for their practice. They should have appropriate supervision, with access to a registered specialist in Occupational Medicine. A register of qualifications and competencies of personnel should be maintained, along with records of continuous professional development, with processes in place to ensure it is regularly monitored and updated.

The OHSP should be able to demonstrate the processes for checking the relevant qualifications and competencies when recruiting new or temporary staff.

Processes should be in place to demonstrate the sharing of best, evidence based, practice amongst clinical staff.

**INFORMATION SYSTEMS:**

The OHSP should operate an efficient management information system, which is capable of: recording and storing occupational health related data, working within legislation such as the Data Protection Act; accessing stored information easily and manipulate it for theirs and their clients’ needs, produce reports for themselves and their clients, performance monitoring including location and whereabouts of work in progress (WIP) and maintain records needed for quality control.
RECORD KEEPING

All OH records should be held centrally, securely and confidentially in accordance with the regulations relating to the Data Protection Act 1998 and the Access to Medical Records Act 1988. Access to clinical data should be restricted to occupational health professionals only.

Appropriate record keeping is regarded as an integral part of patient care. The NMC regard record keeping as a ‘fundamental part of practice’ and a tool for professional practice. The GMC requires that doctors keep clear, accurate, legible and contemporaneous records.

According to the NMC, there are a number of factors that contribute to effective record keeping. They advise that patient/client records should:

- be factual, consistent and accurate, written in a way that the meaning is clear;
- be recorded as soon as possible after an event has occurred, providing current information on the care and condition of the patient/client;
- be recorded clearly and in such a manner that the text cannot be erased or deleted without a record of change;
- be recorded in such a manner that any justifiable alterations or additions are dated, timed and signed or clearly attributed to a named person in an identifiable role in such a way that the original entry can still be read clearly;
- be accurately dated, timed and signed, with the signature printed alongside the first entry where this is a written record, and attributed to a named person in an identifiable role for electronic records;
- not include abbreviations, jargon, meaningless phrases, irrelevant speculation, offensive or subjective statements;
- be readable when photocopied or scanned.

In addition, records should:

- be recorded, wherever possible, with the involvement of the patient/client or their carer;
- be recorded in terms that the patient/client can understand;
- be consecutive;
• identify risks and/or problems that have arisen and the action taken to rectify them;

• provide clear evidence of the care planned, the decisions made, the care delivered and the information shared. (NMC Record Keeping Guidance)

The general information asked about employees is known as “personal data”. Information about health, medical history and any treatment received however is known as “sensitive personal data” Informed consent is required in writing to obtain and process any health related information.

Employees have certain rights under the Access to Medical Reports Act 1988 and the Data Protection Act 1998. Informed written consent of employees is required before access to clinical information may be granted to others, unless disclosure is required by law, or is in the public interest. Care must be taken to protect the information that is held from improper or accidental disclosure.

OHSPs should undertake clinical audits to ensure that all personnel are working to the required standard with regard to record keeping.
OCCUPATIONAL HEALTH IN THE CONSTRUCTION INDUSTRY

An OHSP providing a service to the Construction Industry should have a thorough understanding of its complexity, including the mobility of the workforce.

It is also essential that the OHSP appreciates the type of work, i.e. tasks, the working environment and the hazards that the workforce are typically exposed to. Moreover they should understand the aims of health surveillance and the relevant procedures and be able to advise the employer on the significance of the results.

The OHSP should also have the ability to gain the confidence and co-operation of the employees.

KEY WORK RELATED HEALTH RISKS

The health risks listed below relate to the five leading categories of ill health for the construction industry identified from the annual incidence rates for work related ill health seen by The Health and Occupation Reporting network (THOR) 2003-05 ill health statistics (www.hse.gov.uk/statistics/industry/construction.htm).

- Hand-Arm Vibration Syndrome
- Noise-Induced Hearing-Loss
- Skin Disorders
- Respiratory Disease
- Musculoskeletal Disorders

Although, when compared to other industries, the construction sector has relatively low levels of reported stress, it is still a topic of concern for the industry.

This list is not exclusive and health surveillance should be provided according to the findings of a properly conducted risk assessment.

An overview of these health risks is given in appendix 1 along with clinical guidance for the appropriate health surveillance.

More detailed information can be accessed at the HSE website www.hse.gov.uk

MEDICAL SURVEILLANCE

Employees exposed to asbestos, lead, ionising radiation, compressed air or substances listed in Schedule 6 of The Control of Substances Hazardous to Health Regulations 2002 (COSHH) might require Medical Surveillance by an Appointed Doctor.
HEALTH SURVEILLANCE

Under the Control of Substances Hazardous to Health Regulations 2002 (COSHH) Health surveillance will be appropriate when:

- There is an identifiable disease or adverse health condition related to the work concerned
- Valid techniques are available to detect indication of the disease or condition
- There is a reasonable likelihood that the disease or condition may occur under the particular work conditions, and surveillance is likely to further the protection of the health and safety of the employees covered.

Hazards requiring health surveillance include:

- Substances known to cause dermatitis and occupational asthma.
- micro-organisms, carcinogens, mutagens, respirable silica dust and biological agents

Other Hazards requiring Health Surveillance include:

- Working in a noisy environment.
- Work with vibrating tools or equipment.

Occupational health professionals should be able to differentiate between this type of health surveillance and other health checks which may be undertaken as part of a wellness or health promotion activity.

Any procedures that are undertaken as part of a health surveillance programme should be related to the effects of the specific hazard, identified in the risk assessment, on the health of the individual. It should not be seen as an opportunity to carry out other screening that may be invasive to the individual or costly to the employer unless the effect any health condition detected is of direct relevance to the individual's ability and/or safety to undertake their job.

The types of health surveillance most commonly required as a result of hazard exposure within the construction industry are described in Appendix 1, Clinical Standards.

With regards to Health surveillance, a health record should be created; it should not contain confidential clinical information, and should be kept as confidential personnel
records. OHSPs should advise Management of any measures required to protect the health of the workers. Any effects of work on health that are detected should then be used as feedback to the health risk management process.

**HEALTH MONITORING**

Health monitoring is an informal non-statutory method of surveying the workforce for symptoms of ill health; it does not lead to a diagnosis. However it allows information to be collected from employees and when reviewed may help to identify potential problems in the workplace.

For example low back pain may be identified as the main health effect for drivers and operators of mobile machinery. At present however it is not considered that any methods exist for the detection of changes in people’s backs which can reliably indicate the early onset of low back pain that are specifically related to workplace risk factors. Therefore no formal health surveillance programme can be required for specific causes of back pain, such as whole-body vibration (WBV), manual handling or posture.

Monitoring any symptoms can though enable the employer to be aware of health problems and intervene to prevent their problems being caused or made worse by the work activities. Like health surveillance another important role of health monitoring is to feedback into a system that reviews current control measures.

**Night Workers**

Under the Working Time Regulations 1999, all night workers are entitled to be offered a health assessment before starting night work, followed by health assessment at regular intervals thereafter, the frequency is not specified but annually is considered acceptable. (Example form available to CBH registered OHSPs)

The health assessment usually takes the form of a health questionnaire completed by the employee, followed by a medical examination if necessary. The questionnaire should be designed to protect night workers by identifying any conditions that might mean that working at night poses a potential risk to their health and safety.

Under the Working Time Regulations, a night worker is defined as someone who normally works at least three hours at night on a regular basis. Occasional work at night does not constitute a night worker. Night time is defined as the period between 11pm and 6am. (*Working Time Regulations 1998, SI 1998/1833, ISBN 0 0794109*)
FITNESS FOR TASK ASSESSMENTS

Organisations have a duty under the Health and Safety at Work Act (1974) (HSAWA) to ensure a safe system of work. It is implicit in this duty that the medical fitness of employees is a component of such a safe system of work, to the extent that the effects of a medical condition are foreseeable. Not only do employers have duties towards their employees but under Section 3 of the HSAWA employers also have a duty to ensure that the safety of third parties is not compromised.

In some activities the consequences of adverse events may be serious and the term “Safety Critical Work” has been used. Safety critical work (or roles) were defined in the Faculty of Occupational Medicine’s “Guidance on alcohol and drug misuse in the workplace” 2006 as “those involving activities where, because of risks to the individuals concerned or to others, the employees need to have full, unimpaired control of their physical and/or mental capabilities…”.

Within the Construction industry a number of workers are identified as ‘safety critical workers’ (SCW). For the purpose of the CBH Standards SCW is defined as:

“Where the ill health of an individual may compromise their ability to undertake a task defined as safety critical, thereby posing a significant risk to the health and safety of others”

Whilst the use of professional judgment would help to ensure that an individual is fit to perform a task effectively and without risk to their own or others health and safety in broad terms, although there are general duties of care under the HSAWA, it is likely that only those exposed to safety critical work would need be subjected to a full medical assessment. In this situation the medical fitness standards for the rail industry (Railtrack PLC 2000) may be broadly applicable to safety critical work in the construction industry:

“Candidates shall not be suffering from medical conditions, or be taking medical treatment likely to cause:

- Sudden loss of consciousness;
- Impairment of awareness or concentration;
- Sudden incapacity;
- Impairment of balance or co-ordination;
- Significant limitation of mobility”
In construction the following have been defined as ‘safety critical’:

- All mobile plant operators
- Hi-speed road workers
- Rail track-side workers
- Asbestos licensed workers
- Tunnellers, or those working in a confined space
- Tasks carried out at height where collective preventative measures to control risk are not practicable
- Others as identified by the risk assessment process

**Non-safety critical workers**

Having defined safety critical workers in the previous section, non safety critical workers are therefore workers involved in tasks where any ill health of the individual that compromises their ability to undertake a task would not pose a significant risk to the health and safety of others.

**Health Records**

Whenever health surveillance is required a health record should be set up for each employee. In some circumstances, this may be the only requirement. These records are different from medical records as they do not contain confidential medical information and can therefore be kept securely with other confidential personnel records. A Health Record should include:

- Employee surname and forenames
- Gender
- Date of birth
- Permanent address and postcode
- National Insurance number
- Date of commencement of present employment
- A historical record of jobs involving exposure to substances or processes requiring health surveillance in this employment.

In situations where further health surveillance procedures are required it should also include conclusions of all health surveillance procedures and the date on which and by who they were carried out. Conclusions should be expressed in terms of the
employee's fitness for task and will include the conclusions of the occupational health professional or responsible person, but NOT "confidential clinical data."

Health records should be maintained for those employees for as long as they are under health surveillance. Some regulations - COSHH and those for lead, asbestos, ionising radiations and compressed air - state that records should be retained for much longer (up to 50 years) as ill health effects might not emerge until a long time after exposure.

**REPORTING**

The OHSP will be required to prepare reports for a number of reasons, both in relation to an individual’s fitness to work but also in relation to health and safety topics and general health risk management.

When preparing a report the OHSP should understand the purpose of the report; what should and should not be included, and who / what is it for.

{See Health Surveillance section}

Fitness for task outcomes and reports to employers should be worded in such a way that employees are not subsequently discriminated against following health assessment or surveillance, i.e. where a condition that may have been discovered resulting in unsuitability of the individual to do some elements of their job.

**RIDDOR**

Certain cases of disease are reportable to HSE or local authorities and are listed in section 3 of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)

If as a result of health surveillance or referral a case of a reportable work-related disease is diagnosed, the OHSP should advise the Employer accordingly enabling them to report it to the enforcing authority.

**CBH – THE NATIONAL SCHEME**

The complexities of the construction industry contribute to the difficulties faced in establishing a robust system for managing occupational health within the industry. Those working within occupational health will be familiar with the importance of making comparisons of the results of health surveillance checks with previous results, and identifying any deviations from the norm. For example, in spirometry the
rate of decline of the FEV1 with age should be gradual and consistent with the predicted value, if though there was a greater decline than predicted then this would give cause for concern.

The benefit of a national scheme is to enable such results to be accessed by OHSPs so they can be properly monitored and comparisons made periodically over time, prompting early detection of the onset of any disease hence allowing appropriate action to be taken.

**THE CBH INDUSTRY DATABASE**

CBH have therefore launched an industry database onto which, eventually, it is anticipated all health surveillance outcomes, clinical results and individual fitness status for those undertaking a safety critical role within the Construction Industry, will be entered enabling an effective monitoring of individuals’ health surveillance results.

Registered OHSPs may, having first obtained the individuals consent, enter the results onto the CBH database. Part of the registration process will address any issues surrounding the interface between the CBH industry database and the software being used by the OHSP for ease of capturing the data.

This is not presently a mandatory requirement, however the potential longer term benefits to both industries are, amongst other things:

- Improved health of workforce leading to improved productivity, recruitment and retention and corporate image
- Reduction in lost time, sickness pay cost of recruitment and training of replacement staff
- Reduced down time as a result of absent staff
- Reduced insurance claims for damage to worker’s health

Bringing all this information into one database will also provide the means for national statistics to be analysed to provide better insight into risk management and occupational disease within the construction industry.

**THE DISABILITY DISCRIMINATION ACT**

The purpose of this section is to provide an overview of and a basic understanding of The Disability Discrimination Act 1995.

The Disability Discrimination Act 1995 (DDA) came into force in December 1996, there have since been significant amendments.
According to the DDA, a person has a disability if “He/she has a physical or mental impairment which has a substantial and long term adverse effect on his/her ability to carry out normal day to day activities.

One other highly significant consideration is the impact of treatment on the condition. The DDA looks at an individual as though they were not on medication. Therefore, if a person is using medication, and without the medication would be significantly more ill, the DDA may apply. Specific examples to consider include the insulin-dependent diabetic, and the person suffering from depression. (In the latter case, it is always helpful to try and establish the degree of benefit gained from the medication. If it is minor, and the degree of dysfunction is minor, the DDA may not apply).

The statutory definition of disability discrimination is when “A person directly discriminates against a disabled person, if, on the ground of the disabled persons disability, he treats the disabled person less favourably than he treats or would treat a person not having that particular disability whose relevant circumstances, including his abilities are the same as, or not materially different from, those of the disabled person.”

Changes to the DDA that took effect from December 2005 include:

- Removal of the requirement that a mental illness must be ‘clinically well recognised’ before it can amount to a mental impairment
- Amendment to the definition of ‘disability’ so that a person with HIV, certain types of cancer or multiple sclerosis is deemed to be disabled from the point of diagnosis.

Impairment is taken to affect the ability to carry out normal day to day activities if it affects:

- Mobility
- Manual dexterity
- Physical co-ordination
- Continence
- Speech, hearing or eyesight
- Memory or ability to concentrate, learn or understand
- Perception of the risk of physical danger
- Ability to lift, carry or otherwise move every day objects

The following are currently excluded from the definition of impairment:
• Addiction to or dependency on alcohol, nicotine, or any other substance (other than as a result of it being medically prescribed)
• Tendency to set fires; to steal; to physical or sexual abuse of other persons; exhibitionism; voyeurism.
• Seasonal allergic rhinitis (hay fever) except to the extent that it aggravates the effect of another condition.

Long term impairment is described as that which:
• Has lasted at least 12 months; or
• Is likely to last at least 12 months; or
• Is likely to last the lifetime of the person; or
• Has ceased to have a substantial effect but is likely to recur.

The employer has a duty to consider reasonable adjustments when it knows, or could reasonably expected to know, that an employee has a disability and is likely to be substantially disadvantaged.

The DDA provides examples of the kinds of adjustments an employer may be required to make:
• Making adjustments to the premises,
• Allocating some duties to another person,
• Transferring the person to fill a more suitable existing vacancy,
• Altering the persons working hours,
• Assigning the person to a different place of work,
• Allowing the person to be absent from work for rehabilitation, assessment or treatment,
• Arranging appropriate training or retraining,
• Acquiring or modifying equipment,
• Modifying instructions or training manuals,
• Modifying procedures for testing or assessment,
• Providing a reader or interpreter, and
• Providing supervision.
The OHSP should give advice to the manager regarding what adjustments are indicated. It remains the decision of management to evaluate if the adjustments required are reasonable. (The DDA does not require an employer to implement unreasonable adjustments).

Under the DDA, what may be considered as reasonable in the circumstances will consider:

- The effect of steps taken
- Practicability
- Cost and disruption
- Employer resources

**CONFIDENTIALITY**

This section outlines the professional standards which set out the requirements for an occupational health records security management system.

Maintenance of confidentiality is crucial to the effective performance of any occupational health programme. Therefore all communication between employees and the OHSP shall be treated as ‘medical in confidence’.

The OHSP shall hold and maintain individual medical records, such as generated in cases of sickness absence, referrals or medicals, in lockable filing cabinet(s) or secure electronic filing systems.

Records would be only accessible to OHSPs, thus providing continuity of care whilst retaining confidentiality. Construction workers would have access to their records on written request under the Data Protection Act. Management would be informed of such requests before the information was provided.

Medical reports requested from GP and specialists are subject to the Access to Medical Reports Act 1988.

The OHSP should operate a clear desk policy.

The OHSP should support the confidential transfer of records to and from other occupational health providers.

Occupational health surveillance records shall be maintained for at least 40 years, with a records archive facility in place for those employees who left employment.
GUIDANCE ON THE USE OF THE CLINICAL STANDARDS

The purpose of this section is to provide OHSPs with best practice guidance in relation to all aspects of health assessments and health surveillance within the construction industry. The clinical standards include an outline of the most commonly identified health risks, the reasons for health surveillance as well as an overview of the principles of conducting various clinical procedures.

HEALTH ASSESSMENT MATRIX

A health assessment matrix has been developed, primarily for employers within the construction industry; this can also be used by OHSPs, as a guide to the relationship between job roles and the type of health assessment, (i.e. health surveillance or fitness for task for SCW) that may be required, subject to the risk assessment process. It can be used as a means of quickly identifying the health assessments required for an individual undertaking a particular job role. It demonstrates the application of health surveillance / fitness for task and general health checks related to the various job roles found within the construction industry and more typical hazards encountered. The health assessment matrix can be found in Part One of The Industry Standards. The matrix is a guide, final decisions as to the health surveillance required for each worker, or group of workers, needs to be made on the basis of the assessment of risks to which the worker/s is exposed.

FITNESS STANDARDS

Part one of the CBH Standards includes guidance on fitness standards, the purpose being to provide an overview for employers but primarily to provide guidance to the OHSP when determining the outcome of a medical assessment and the subsequent capability of an individual, in relation to their health, to do their job. Part one also includes guidance on the frequency of assessments.

CLINICAL STANDARDS

The clinical standards which can be found in appendix 1, directly relate to the fitness standards in Part One of The Occupational Health Standards for the UK Construction Industry.

Each clinical standard, where possible, follows the same format for ease of reference.
EXAMPLE FORMS

Templates of example forms are available for the use by OHSPs registered with CBH. These can be freely downloaded from the ‘members only’ part of the CBH website.
REFERENCES

Access to Medical Reports Act 1988
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HAVS Screening Limited www.Whitefinger.co.uk
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Health and Safety Executive (HSE) [http://www.hse.gov.uk](http://www.hse.gov.uk) (HSE Infoline 0845 345 0055)

HSE guidance note MS7
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HSE guidance note MS26
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Management of Health and Safety at Work Regulations 1999


Medical and occupational evidence for recruitment and retention in the Fire and Rescue Service, Office of the Deputy Prime Minister

Medical aspects of occupational asthma MS25, HSE

Nursing and Midwifery Council (NMC) [www.nmc-uk.org](http://www.nmc-uk.org)

Occupational Health Standards in the Construction Industry CWH/07/04 HSL
[http://www.hse.gov.uk/research/rrhtm/rr518.htm](http://www.hse.gov.uk/research/rrhtm/rr518.htm)

Proposals for new Control of Vibration at Work Regulations (Northern Ireland) 2005.

HSENI (Health and Safety Executive for Northern Ireland)
[www.hseni.gov.uk/legislation/](http://www.hseni.gov.uk/legislation/)

PUWER Regulations 1998

Royal Infirmary of Edinburgh NHS Trust (1997)

Supply of Machinery (Safety) Regulations 1992

The Control of Vibration at Work Regulations 2005. Guidance on Regulations. HSE.

HSE Books

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995

ACKNOWLEDGEMENTS

We would like to thank the HSE for their contribution to these Occupational Health Standards for the Uk Construction Industry.
APPENDIX 1 CLINICAL STANDARDS

CLINICAL STANDARD A: PRE PLACEMENT HEALTH QUESTIONNAIRE

OHSPs are often asked to assess a new employee’s health in terms of suitability for their proposed job. There are many legal and ethical implications and considerations to be made, this assessment should always be made with a thorough understanding of the demands of the job and in conjunction with the job description.

What is Health?

The World Health Organization (WHO) maintains that ‘health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity’.

What is a Pre-placement Health Questionnaire?

It is a means of collecting data related to the demands of the proposed job, personal data of the individual as well as details of their health status. The questionnaire should only collect as much information as is necessary, and the Faculty of Occupational Medicine advise that personal data requested should be ‘adequate, relevant and not excessive’

What is the purpose of a Pre-placement Health Questionnaire?

- To establish the compatibility between the demands of the proposed job with the personal, physical and psychological capacity of:
  - A potential employee to undertake the duties of the role being offered
  - An existing employee prior to transfer to a post where specific fitness for task criteria are required, i.e. safety critical work
- To comply with the requirements of current, future or pending UK or EU Legislation and / or specific codes of practice
- To prevent an employee being put at risk due to their state of health.
- To ensure, that the potential employee, will not constitute a health hazard or risk to the safety of other employees, customers or the general public.
- To identify health conditions that will require on-going advice, adjustments or management.
o Establish a base-line documented record of an employee’s health, which would be used if any compensation claims arise as a result of ill-health in the future

**Relevant Regulations:**

There are many pieces of legislation applicable to the recruitment process, but those more specifically related to Pre-placement Health Questionnaire include the following: (This list is not exhaustive)

- The Health and Safety at Work etc Act 1974
- The Management of Health and Safety at Work Regulations 1999 (as amended)
- The Disability Discrimination Act 1995
- The Data Protection Act 1998
- Access to Medical Reports Act 1988

**Conducting Pre-placement Health Questionnaire screening:**

**Procedure:**

The OHSP should advise employers that the questionnaire is forwarded to them in such a way as to remain confidential. Organisations will have varying procedures regarding the processing of pre-placement health questionnaires with respect to when they are completed, how and when they are screened and the turnaround times, however the principles of screening remain the same.

When reviewing the questionnaire **ALL** parts of the form, including boxes, MUST be completed. If not fully completed, or if insufficient evidence is available resulting in the OHSP being unable to determine the potential employee’s fitness for work, subject to the agreed procedure, the OHSP should seek to obtain that information by contacting the individual to discuss the omission and complete accordingly. This may initially just involve a telephone call to clarify any points or gain further information. Any parts of the questionnaire that have been completed or commented on by the OHSP during the telephone consultation should be apparent and clearly signed.
If information had been omitted, the OHSP should ask why. It may be that the individual didn’t wish to disclose the information – e.g. excess alcohol consumption.

Typical issues that may require further clarification include:

- Depression / anxiety, mental health issues, nervous breakdown
- Taking medication for psychiatric problems
- Alcohol or substance abuse with no end date/treatment
- Back / musculoskeletal problems – difficulties with standing, walking, driving, lifting, stair climbing or the use of the hands
- Excessive sickness absence in the past 2 years
- Single episode of absence lasting more than 4 weeks
- Eating disorder e.g. anorexia, bulimia or had unexplained weight loss
- Respiratory Disease e.g. asthma, bronchitis (CPD)
- High blood pressure
- Cancer plus treatment in past 10 years
- Disability whether physical, learning or intellectual
- Been denied a job or drivers license on health grounds in the past
- Prescribed medication for at least six months continuously
- Diabetes, insulin dependant, especially if working shifts/nights
- Recent diagnosis of diabetes and lack of clarity over control
- Seen a specialist/consultant or been admitted to hospital (not just A&E ) for a health problem in last two years
- History of epilepsy, Stroke or unexplained state of unconsciousness
- Hearing or visual impairment

When contacting the individual, bear in mind the following:

- Introduction: explaining who you are, what your role is, and the purpose of the call. Explain the query is in connection with their pre-placement questionnaire.
- Be sensitive to the fact that they might not be alone so enquire whether they are able to talk at present or whether they would prefer to call back when convenient.
- If it is convenient to talk to them, discuss the query fully with them. Undeclared or forgotten information may be offered at this stage.

The following questions may be asked in relation to any condition identified:
• Is the individual undertaking a safety/critical role?
• How many days have they had off work in the past 2 years?
• What insight does the individual have into their condition?
• What treatment(s) and/or specialist referrals were conducted at the time of the condition and subsequently?
• Does the individual continue to require medication/treatment for the condition?
• What was the individual’s level of work functioning during each episode of the condition (if they remained at work)?
• What course has the condition taken since the initial event?
• When did the most recent episode occur?
• Is this employment likely to provoke/exacerbate the condition?
• What are the job requirements – will the individual be expected to travel and/or work away from home for prolonged spells?
• Does the individual continue to require specialist referral/treatment for the condition?
• What symptoms (if any) does the individual suffer at present?
• How are they now?

The following may be considered with regard to specific conditions:

• Depression
  • Does the individual continue to require medication/treatment for the condition?
  • What was the cause - endogenous or exogenous (home/work)?
  • Have these factors been addressed?
  • Is there a family history of depression?
  • How has she/he been since then when dealing with life events, stressful situations, work duties/stresses?

• Stress
  • What was the cause – i.e. home/work factors as the trigger?
  • Have these factors been addressed / resolved? Do they have any remaining impact?

• Back pain
  • What was the cause?
  • What are the job requirements – will the employee be expected to do lifting, driving etc? If so, will this be frequently required?
o What are the individual’s current capabilities and hobbies?
o Has the individual received manual handling training?
o Was any pathology identified as the cause or purely mechanical in nature?
o When did the most recent episode occur?
o What treatment(s) and/or specialist referrals / physiotherapy / rehabilitation / chiropractor / osteopath were conducted at the time of the condition and subsequently?
o What was the individual’s level of work functioning during each episode of the condition (if they remained at work)?
o Do they perform regular back exercises?
o Do they practice good lifting techniques outside of work, as well as within the work environment?

• Work related upper limb disorders
  o What was the cause? Who made the diagnosis?
  o Were any other employees in the workgroup affected at the time?
  o What other factors/stressors were occurring at the time the individual developed symptoms?
  o Does the individual continue to require medication/treatment for the condition?
  o Was any true pathology identified (e.g. carpal tunnel syndrome) and has it been addresses?
  o In their previous job, what were the job requirements – was the individual expected to perform repetitive movements?
  o What are the job requirements – will the individual be expected to perform repetitive movements, e.g. keyboard work etc? If so, will this be frequently required?

• Alcohol
  o What was the cause - home/work factors as the trigger?
  o When did the most recent episode occur?
  o What are their coping strategies and ability to cope?
  o How was/is their condition managed?
  o What was the individual’s level of social/family functioning during each episode of the condition?
  o Does this job entail regular and/or prolonged periods away from the individual’s specialist support?
What source(s) of ongoing support does the individual receive?

Are concentration impairment and a prolonged reaction time a hazard in this employment? (Yes if individual is responsible for driving, machinery operation, public order etc.)

Does the individual abstain and is this continuing?

Has alcohol led to problems with relationships/friends/family?

Has alcohol led to neglect of family and/or work?

What time do you start drinking in the day?

Do you drink before this?

Have you been in trouble with the law (violent crime)?

Go through an average day’s drinking.

What was the cause - home/work factors as the trigger?

When did the most recent episode occur?

Is the individual undertaking a safety/critical role?

Are concentration impairment and a prolonged reaction time a hazard in this employment? (Yes if individual is responsible for driving, machinery operation, public order etc.)

Does the individual abstain and is this continuing?

The ‘CAGE’ questionnaire is a short list of questions that can indicate if alcohol dependence is a possibility: Have you ever:

- thought you should Cut down on your drinking?
- felt Annoyed by others criticising your drinking?
- felt bad or Guilty about your drinking?
- had a drink first thing in the morning to steady your nerves or get rid of a hangover? (Eye-opener.)

Two or more positive answers to these questions suggest dependence.

- Drugs

Have drugs led to neglect of family and/or work?

What time do you start taking drugs in the day?

Do you take any drugs before this?

Have you been in trouble with the law (violent crime)? Have you had any convictions for crime – to buy drugs?

Go through an average day’s drug consumption.

Any odd behaviour – e.g. visual hallucinations, elation, mania etc.?

Any unexplained nasal discharge (cocaine sniffing)?
- Any marked veins, abscesses, hepatitis, AIDS etc (results of injecting)?
- Frequent use of painkillers – only opiates being used?

**Eating Disorder(s)**
- What eating disorder(s) did/does the individual have?
- Do they have insight about their condition(s) or are they in denial?
- What was the perceived cause of each - home/work factors as the trigger?
- When did the most recent episode occur?
- What amount of weight have they regained since then? What amount of weight have they regained since lowest weight?
- Is their weight now stable at a "safe" level? What is the normal weight for someone of his/her height and age?
- Does this job entail regular and/or prolonged periods away from the individual’s support (family/friends)?
- Does this job entail regular and/or prolonged periods away from the individual’s Specialist support?
- What source(s) of ongoing support does the individual receive?
- What will the individual do in relation to meal breaks if they are given the job?
- What is the individual’s stamina level – if food was delayed for a period, e.g. meeting/patrol took longer than anticipated?
- If the original factor that provoked the condition recurred, how does the individual feel they would react this time – would they do the same thing again?
- Is the individual of sufficient ability for the job requirements – e.g. are they strong enough if lifting/manual handling is required?

**Chronic Fatigue Syndrome**
- Who made this diagnosis? Is it correct?
- What was the cause in the employee’s opinion?
- Were there any pathologies identified, e.g. Glandular fever, whenever the symptoms commenced?
- Has there been any psychotherapeutic input, e.g. CBT?
- Has the individual received and/or are they following a graded-activity programme?
- What are their current capabilities?
What is the individual’s current activity level?

How much activity can the individual perform before becoming fatigued? DOES THIS MATCH THE JOB REQUIREMENTS?

Is concentration required for the job? How long can the individual concentrate before becoming fatigued/tired/bored?

Why are they returning to work now?

This guidance just covers the specific conditions listed, if the OHSP requires further guidance to determine the suitability of the applicant to the proposed post, the OHSP should seek guidance from an OH Physician or contact the CBH advice line.

**Determining the Outcome:**

A professional judgement should be made by the OHSP on the suitability of the applicant to the proposed post by reviewing the questionnaire, making an assessment of the potential employee’s health and functional capacity based on the information provided, ensuring they have a clear understanding of any medical conditions referred to, in line with the potential job tasks/demands, working environment and fitness to work issues. If the OHSP feels unable to determine the suitability of the applicant to the proposed post or the applicant has declared a condition that requires a medical examination, a face to face consultation may be recommended, if necessary with an OH Physician.

The OHSP should also establish any requirements for baseline health surveillance or whether a health assessment is required due to the nature of their role, i.e. are they a safety critical worker?

Please refer to Part One of The Industry Standards for fitness criteria.

**Advice to Employee**

If a condition was highlighted which prompted a conversation with the employee, they should be advised of the process of informing the employer of the outcome. If a medical report is to be requested from the individuals doctor, they should be informed of their rights and their consent obtained. Should anything that requires specific recommendation be identified, the individual should be advised, i.e. regarding use of personal protective equipment.
Advice to Employer

Subject to the arrangement between the OHSP and the employer, a fitness for work certificate should be supplied; this should not include any clinical information, merely the fitness of the individual for the proposed work and whether any restrictions or adjustments are recommended. Example forms are available to OHSP’s registered with CBH.

Record keeping

Any conversation with the individual should be documented, including the outcome. No alterations or amendments should be made to the questionnaire unless an error or omission is highlighted during the telephone call, in which case it should be clearly signed and dated by the OHSP.

Reports

Useful phrases when writing reports to management:

- **This person has a medical problem which is well / not controlled and does / does not prevent the person from doing all aspects of the job.**

- **There is a high/ moderate / low risk of the medical condition getting worse in the future, and if so it would / would not have an impact on the person’s ability to do the job.**

- **This person has a medical condition which could cause sudden collapse without warning. We advise that the immediate line manager and the first aider are aware of this potential and the action that should be taken.**

- **This person has an ongoing medical condition which affects their ability to do some aspects of the job. The restriction is that the person should not lift weights of more than 5kg. This restriction is permanent.**

- **This person has a medical condition which prevents them from doing some parts of the job. Our advice is that the medical condition is likely to be covered by the DDA. Therefore, we suggest that a meeting is held between the applicant and the management to discuss the job tasks, the restrictions and the adjustments that would be required. It would then be up to the management to decide if the adjustments were reasonably practicable.**

- **This person does have a (chronic) underlying ill health problem which although does not require any reasonable adjustments at present, may do so**
at some point in the future, they have been advised to get in touch with yourselves / Occupational Health should he / she become symptomatic / experience any deterioration in symptoms’, etc

- If this individual’s behaviour changes and/or they attend work smelling of alcohol, they should be referred to Occupational Health immediately.

GP / Specialist reports

Subsequent to the assessment of the pre-placement health questionnaire, the OHSP may feel it appropriate, subject to consent from the individual, to request a GP / specialist report. Such a report can be useful in obtaining:

1. Clinical details e.g. results of MRI scan of lumbar spine.
2. Details of treatment plan.
3. Information on progress of disease.
4. GP/Specialist view of current physical or mental capability.

The OHSP should provide the GP/specialist with an outline of the job the person will be doing and the hazards involved. The OHSP should not ask the GP/specialist opinion on whether the person is fit for the job.

It is important to note:

- GP / specialist may have only heard employee’s side of the story.
- They may subconsciously collude with employee.
- Report can be edited by employee.
- They are unlikely to confront employee.
- They are usually not trained in Occupational Health.
- They have no role to advise employer.
- Not usually regarded as “competent person” by HSE.
CLINICAL STANDARD B: PRE-PLACEMENT HEALTH ASSESSMENT / MEDICAL

What is a Pre-placement Health assessment / medical?

Subject to the outcome of the pre-placement health questionnaire screening, it may be deemed necessary to conduct a more detailed pre-placement health assessment to facilitate the OHSPs decision of the suitability, on health grounds, of an individual to undertake a specific task.

For certain specific activities there are legal duties to carry out pre-placement assessments of an individual’s fitness for task (for example, under the, Asbestos at work regulations, 2006; Control of Lead at Work Regulations (CLAW) 2002, The Ionising Radiation Regulations (IRR) 1999 and The Work in Compressed Air Regulations 1996). However, we would also recommend that pre-placement assessments are undertaken for ‘safety critical workers’ (see standard C).

Baseline health surveillance assessments are also recommended (subject to a suitable risk assessment) for individuals exposed to a number of hazards including hand-transmitted vibration (L140), noise (L108), and silica (G404).

Please refer to the relevant standard for specific health surveillance / assessment.

What is the purpose of a Pre-placement Health assessment / medical?

To determine by a more detailed examination / consultation, the personal, physical and psychological capacity of a potential employee to undertake their proposed duties.

Relevant Regulations LINK

This list is not exhaustive:

- The Health and Safety at Work etc Act 1974
- The Management of Health and Safety at Work Regulations 1999 (as amended)
- The Disability Discrimination Act 1995
- The Data Protection Act 1998
- Access to Medical Reports Act 1988
- Asbestos at work regulations, 2006;
- Control of Lead at Work Regulations (CLAW) 2002
**Conducting a Pre-Placement Health Assessment / Medical**

**Equipment / Documentation required**

Assessment form (Example forms are available to OHSP’s registered with CBH)

Consent form (Example forms are available to OHSP’s registered with CBH.)

Pre-placement health questionnaire (Example forms are available to OHSP’s registered with CBH.)

Equipment relevant to other tests to be undertaken (see appropriate section)

**Procedure**

- Introduce yourself
- Confirm identity of employee
- Explain purpose, process and procedure for Pre-placement health assessment / medical
- Check documentation to identify exposures
- Consent to undertake health assessment should be obtained, the consent form should be signed by the individual and the OHSP, this should also include their consent for their clinical details to be held on the CBH database
- Undertake specific checks

**Determining the outcome**

With consideration given to the potential job tasks/demands, working environment and fitness to work issues, and having undertaken an assessment of the potential employee’s health and functional capacity, a professional judgement should be made by the OHSP on the suitability of the applicant to the proposed post. The results of any specific health surveillance or fitness to undertake a safety critical role would also need to be considered. (See relevant section)

Please refer to The Industry Standards Part One for fitness criteria.

**Advice to Employee**

Provide any relevant health education, including use of PPE, employee awareness leaflet, inform employee to notify Manager of any changes to their health if they are SCW
Advice to Employer

Subject to the arrangement between the OHSP and the employer, a fitness for task certificate should be supplied; this should not include any clinical information, just the fitness of the individual for the proposed work and whether any restrictions or adjustments are recommended. (Example forms are available to OHSP’s registered with CBH)

Record keeping

Appropriate occupational health notes should be completed with a record of the baseline health surveillance if conducted.

Reports

Conclusions should be expressed in terms of the employee’s fitness for task and will include the conclusions of the occupational health professional, but NOT "confidential clinical data."

The CBH database should be updated.
**CLINICAL STANDARD C: SAFETY CRITICAL WORKERS**

**What is Safety Critical Work (SCW)?**

In some activities the consequences of adverse events may be serious and the term “Safety Critical Work” has been used.

SCW is defined within the CBH Standards as:

*Where the ill health of an individual may compromise their ability to undertake a task defined as safety critical, thereby posing a significant risk to the health and safety of others*

A suitable risk assessment of any activity should identify whether it has a safety critical nature and whether in the event of worker incapacity this would be likely to result in a significant risk of harm to the individual worker performing the task or to others i.e. third parties.

A health assessment is recommended before the person is permitted to work in safety critical environments; the results of which will be entered on the CBH Database.

A medical assessment by an occupational physician shall be carried out when there is any doubt as to a person’s fitness to work in safety critical environments following illness or injury, whether or not the person concerned has been absent from work.

Where a person does not meet the full requirements of the Standard at a medical assessment, a decision to permit that person to continue may be taken by the employer, subject to the following steps being taken:

- The advice of the OHSP having been taken regarding the likely effects on the ability of that person to look after their own safety on a construction site, and appropriate measures to mitigate those effects
- The need for any reasonable adjustments that might be made under the DDA 1995
- A risk based approach for assessing fitness and the following points considered:
  - job requirement/task
  - type of hazard exposure
The employer shall document the measures to be taken and ensure that the person concerned and their immediate supervisor or manager are informed of any medical limitations or changes to systems of work.

**What is the Health Assessment for a Safety Critical Worker?**

It is a medical assessment of an individual’s ‘fitness for task’ against defined criteria and the use of professional judgment to ensure that an individual is fit to perform a task effectively and without risk to their own or others health and safety.

The medical fitness standards for the rail industry (Railtrack PLC 2000) specify general health requirements, which may be broadly applicable to safety critical work in the construction industry:

“Candidates shall not be suffering from medical conditions, or be taking medical treatment likely to cause:

- sudden loss of consciousness;
- impairment of awareness or concentration;
- sudden incapacity;
- impairment of balance or co-ordination;
- significant limitation of mobility.”

The requirement for assessment of fitness for safety critical work should only be applied where it is necessary and not used as a form of medical selection and potential disability discrimination. Where an activity is safety critical and an essential job requirement, it may be reasonable not to employ an individual even if the Disability Discrimination Act was likely to apply, if there was risk of harm to third parties. The risk assessment that identifies an activity as safety critical should therefore distinguish between the risk of harm to the individual worker and from that to third parties.

The health assessment should consist of:

- A baseline health questionnaire to establish any current or previous medical history
- blood pressure check
- audiometry – low frequencies testing
spirometry where indicated
visual acuity
urinalysis
mobility and co ordination assessment
drugs and alcohol testing
stress questionnaire

**Purpose of the health assessment**

To identify any possible medical conditions that may potentially have an adverse affect leading to the safety of the individual or that of others being jeopardised, allowing therefore for that individual to be restricted to non SCW hence removing that risk.

**Relevant Regulations LINK**

This list is not exhaustive:

- The Health and Safety at Work etc Act 1974
- The Management of Health and Safety at Work Regulations 1999 (as amended)
- The Disability Discrimination Act 1995
- The Data Protection Act 1998
- Access to Medical Reports Act 1988
- Asbestos at Work Regulations, 2006;
- Control of Lead at Work Regulations (CLAW) 2002

**Conducting the Health Assessment:**

**Equipment / Documentation required**

Assessment form (Example forms are available to OHSP’s registered with CBH)
Consent form (Example forms are available to OHSP’s registered with CBH)
Other relevant questionnaires
Equipment relevant to other tests to be undertaken as above (see appropriate standard)

**Procedure**

- Introduce yourself
- Confirm identity of employee
- Explain purpose, process and procedure for Fitness assessment for SCW
- Check documentation to identify exposures
- Consent to undertake health assessment should be obtained, the consent form should be signed by the individual and the OHSP, this should also include their consent for their clinical details to be held on the CBH database
- Undertake specific checks

**Determining the outcome**

Please refer to the ‘required standard for safety critical workers’ in Part one of the Occupational Health Standards for the UK Construction industry. These state that the required medical standards for SCW are:

- Health questionnaire: no evidence of ill health reported. Refer to following specific medical conditions
- Blood pressure: Diastolic below 95mmHg Systolic below 150mmHg
- Hearing: requires pass test result HSE Category 1 or 2
- Respiratory Health: FEV1% greater than 70% of predicted value. No evidence of respiratory symptoms on questionnaire.
- Visual acuity: achieves an aided or unaided binocular visual acuity 6/12
- Colour perception: (where required through risk assessment process) achieves a pass red / green using Ishihara test plates or the city university test
- Mental Health: no evidence of mental ill health which is likely to impact on ability to work
- Urinalysis: no evidence of blood, glucose and / or protein in urine
- Mobility and co ordination assessment: no evidence or reporting of musculoskeletal or neurological disorder.
- Drug and Alcohol Screening: negative test result. No evidence of OTC or prescribed medication that is likely to cause symptoms.

Failure to meet any of these Standards will require review with an occupational physician and an operational risk assessment before being permitted to continue to work in safety critical roles. Workers should be temporarily restricted from working in a safety critical role whilst undergoing further investigation and testing, dependant on symptoms and clinical opinion.

Advice to Employee

The individual should be informed of the need to notify their manager of any changes to their health.

Any relevant health education, including on the use of PPE, should be given, as well as the outcome of the health assessment.

Advice to Employer

Subject to the arrangement between the OHSP and the employer, a fitness for task certificate should be supplied; this should not include any clinical information, just the fitness of the individual for the proposed work and whether any restrictions or adjustments are recommended.

Record keeping

Appropriate occupational health notes should be completed with a record of the baseline health surveillance if conducted.

Reports

Conclusions should be expressed in terms of the employee’s fitness for task and will include the conclusions of the occupational health professional, but NOT “confidential clinical data.”

The CBH database should be updated.
**Clinical Standard D: Statutory Medicals**

**What are statutory medicals?**

These are medicals that are required by Regulations

- **Asbestos**: Asbestos medicals are required under Regulation 22 of The Control of Asbestos Regulations 2006 and shall be carried out by an Appointed Doctor. Refer to ACOP.

- **Lead**: Under the Control of Lead at Work Regulations (CLAW) 2002 each employee whose exposure to lead is 'significant' as defined by CLAW must be under suitable medical surveillance by an Appointed Doctor. Refer to ACOP.

- **Ionising Radiation**: Employees who are likely to receive an effective dose of more than 6mSv per year, or an equivalent dose which exceeds three-tenths of any relevant dose limit should be designated 'classified persons' under The Ionising Radiation Regulations 1999. Classified workers must have health surveillance by an appointed doctor. Detailed guidance on the requirements can be found in the Health and Safety Executive (HSE) Approved Code of Practice and Guidance to the Regulations L121 'Work with Ionising Radiation'.

**What are the Associated Health Risks?**

- **Asbestos**
  
  Breathing in asbestos fibres can lead to asbestos-related diseases. These include asbestosis, mesothelioma and cancers of the chest and lungs and they kill more people than any other single work-related cause.

- **Lead**
  
  If the level of lead in an individual's body gets too high, it can cause:
  
  - headaches;
  - tiredness;
  - irritability;
  - constipation;
  - nausea;
  - stomach pains;
Continued uncontrolled exposure could cause far more serious symptoms such as:

- kidney damage;
- nerve and brain damage.

These symptoms can also have causes other than lead exposure so they do not necessarily mean that lead poisoning has occurred.

A developing unborn child is at particular risk from exposure to lead, especially in the early weeks before a pregnancy becomes known.

**Ionising Radiation**

Exposure to high doses of ionising radiation can result in skin burns, hair loss, nausea, birth defects, illness and death. Exposure may increase an individual's chance of getting cancer. The overall effect depends on how much ionising radiation is received and over what period of time, as well as personal factors such as sex, age at the time of exposure, and general health and nutritional status.

**One of the Purposes of Statutory Medicals:**

One of the ways in which an employer can monitor exposure of an individual to the above hazards to ensure that any exposure levels are within the statutory requirements, and if not to highlight that further control measures are required.

**Relevant regulations LINK**

This list is not exhaustive:

- The Health and Safety at Work etc Act 1974
- The Management of Health and Safety at Work Regulations 1999 (as amended)
- The Data Protection Act 1998
- Access to Medical Reports Act 1988
- Asbestos at work Regulations, 2006;
- Control of Lead at Work Regulations (CLAW) 2002
- Control of Substances Hazardous to Health Regulations (COSHH) 2002
Ionising Radiation Regulations 1999

**Conducting Statutory Medicals**

Statutory medicals need to be conducted by or overseen by an Appointed Doctor. Please refer to Standard O – Biological monitoring for further information.
CLINICAL STANDARD E: MUSCULOSKELETAL HEALTH, MOBILITY AND CO-ORDINATION

What are Musculoskeletal Disorders?

Musculoskeletal disorders (MSD) are problems affecting the muscles, tendons, ligaments, nerves or other soft tissues and joints and include conditions such as low back pain. Injury or ill health can happen while doing any activity that involves some movement of the body, from heavy lifting to typing. Although there is no requirement for health surveillance for MSD, symptoms can be monitored.

There are certain tasks and factors that increase the risk such as:
(1) repetitive and heavy lifting
(2) bending and twisting
(3) repeating an action too frequently
(4) uncomfortable working position
(5) exerting too much force
(6) working too long without breaks
(7) adverse working environment (e.g. hot, cold)
(8) psychosocial factors (e.g. high job demands, time pressures and lack of control).

What is the process for monitoring for MSD’s

A musculoskeletal questionnaire can be completed periodically and returned to the OHSP.

A responsible person can be trained and appointed so that employees can report any musculoskeletal symptoms. The reporting of musculoskeletal symptoms should lead to referral to the OHSP for more detailed assessment.

It is recommended that a statement of fitness to continue in work with exposure to musculoskeletal or manual handling hazards should be recorded including any advised restrictions.

Purpose of monitoring for MSD’s

There are no well founded methods for selecting workers to predict future musculoskeletal problems. However, the aim of health monitoring for musculoskeletal disorders is to detect symptoms early and ensure the worker gets appropriate advice and treatment and importantly, modify the work where practicable.
**Relevant Regulations**  
This list is not exhaustive:

- The Health and Safety at Work etc Act 1974
- The Management of Health and Safety at Work Regulations 1999 (as amended)
- The Disability Discrimination Act 1995
- The Data Protection Act 1998
- Access to Medical Reports Act 1988
- Manual Handling Operations Regulations 1992 (as amended)
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)

**Conducting a Musculoskeletal Health Assessment:**

**Equipment / Documentation required**

Musculoskeletal health assessment questionnaire (Example forms are available to OHSP’s registered with CBH)

Consent form (Example forms are available to OHSP’s registered with CBH)

Results of previous musculoskeletal health assessment

**Procedure**

- Introduce yourself
- Confirm identity of employee
- Explain purpose, process and procedure for musculoskeletal health assessment
- Check documentation to job role and demands
- Consent should be obtained, the consent for should be signed by the individual and the OHSP, this should also include their consent for their clinical details to be held on the CBH database (Example forms are available to OHSP’s registered with CBH)
- Complete appropriate assessment form with individual, clarifying any points as necessary.
Determining the outcome

If any symptoms are reported that may be caused or made worse by the individuals work, the individual should be assessed by a suitably trained health professional for a full functional assessment.

Please refer to Part One of The Industry Standards for fitness criteria.

Advice to Employee

Provide relevant health education, including back care, employee awareness leaflet, inform employee to notify Manager of any changes.

Advice to Employer

A fitness for task certificate should be supplied; this should not include any clinical information, just the fitness of the individual for the proposed work and whether any restrictions or adjustments are recommended.

Record keeping

Appropriate occupational health notes should be completed with a record of health assessment.

Reports

Anonymised data may be used as part of the health risk management programme to highlight where there appears to be a link between an increase of musculoskeletal symptoms reported and the tasks being undertaken.

The CBH database should be updated.
What is Occupational Skin Disease?

Occupational skin disease may be defined as a disease in which workplace exposure to a physical, chemical, or biological agent or a mechanical force has been the cause of or played a major role in the development of the disease. Work related dermatitis (sometimes called eczema) forms 80% of occupational skin diseases and is caused when someone comes into contact with a hazardous agent(s).

Irritant dermatitis is caused by a non-infective agent, physical or chemical, capable of causing cell damage if applied to the skin for sufficient time and in sufficient concentration (medical aspects of occupational skin disease guidance note MS24 [HSE]). The fine particles of cement, often mixed with sand or other aggregates to make mortar or concrete, can abrade the skin and cause irritation resulting in dermatitis. With treatment, irritant dermatitis will usually clear up. But if exposure continues over a longer period the condition will get worse and the individual is then more susceptible to allergic dermatitis. Allergic dermatitis (in susceptible individuals) is caused by initial contact with a skin sensitiser (such as epoxy resins and their hardening agents, acrylic resins, formaldehyde and hardwoods), which provoke a chain of immunological events leading to sensitisation. Further skin contact with that particular sensitiser can then cause allergic contact dermatitis.

For employees who may be exposed to any agent known to cause skin damage (medical aspects of occupational skin disease guidance note MS24 [HSE]) there should be arrangements to identify cases of occupational skin disorders. COSHH (2002) requires employers to provide employees with information about the precautions that should be taken including characteristic signs and symptoms of occupational skin disorders. Duties exist under COSHH (2002) and MHSW (1999) regulations, where a risk assessment has identified employees to be at risk to ensure employees are under suitable health surveillance.

What is skin health surveillance?

It is recommended that a ‘responsible person’ should be trained and appointed to carry out regular (at least monthly) skin checks and annually to use a brief skin questionnaire. Any employees identified with or reporting skin problems must then be referred for more detailed assessment with an OHSP.
Purpose of skin health surveillance

To assess whether the use particular substances has caused an adverse reaction, and identify early any sign of the onset of occupational skin disease.

Relevant Regulations

This list is not exhaustive:

- The Health and Safety at Work etc Act 1974
- The Management of Health and Safety at Work Regulations 1999 (as amended)
- The Disability Discrimination Act 1995
- The Data Protection Act 1998
- Access to Medical Reports Act 1988
- Control of Substances Hazardous to Health (COSHH) (2002)
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)

Conducting skin health surveillance:

Equipment / Documentation required

Skin health surveillance form (Example forms are available to OHSP’s registered with CBH)
Consent form (Example forms are available to OHSP’s registered with CBH)
Results of previous skin surveillance

Procedure

Introduce yourself
Confirm identity of employee
Explain purpose, process and procedure for Skin health assessment
Check documentation to identify exposures
Consent to undertake health surveillance should be obtained, the consent form should be signed by the individual and the OHSP, this should also include their consent for their clinical details to be held on the CBH database
Complete appropriate assessment form with individual, clarifying any points as necessary.
Undertake specific skin checks, looking for redness, itching, scaling, swelling, blistering, flaking and cracking

**Determining the outcome**

If any sign of redness, itching, scaling, swelling, blistering, flaking and cracking of the skin is identified or reported, which appears to be work related, the individual should be assessed by a physician for a diagnosis to be made.

Please refer to The Industry Standards Part One for fitness standards.

**Advice to Employee**

Provide relevant health education, including use of PPE, employee awareness leaflet, inform employee to notify Manager of any changes.

**Advice to Employer**

It is recommended that when a diagnosis of Dermatitis is made by a doctor the employer should be advised of this fact with the employee’s consent and it needs to be reported as a case of disease for the purposes of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995.

**Record keeping**

Appropriate occupational health notes should be completed with a record of health surveillance.

**Reports**

A Health Record should be set up, including:

- Employee Surname and forenames
- Gender
- Date of birth
- Permanent address and postcode
- National Insurance number
- Date of commencement of present employment
- A historical record of jobs involving exposure to substances or processes, in this employment, that requires health surveillance.
- It should also include conclusions of the skin check and the date on which and by whom they were carried out. Conclusions should be expressed in
terms of the employee’s fitness for task and will include the conclusions of the occupational health professional or responsible person, but NOT “confidential clinical data.”

The CBH database should be updated.
CLINICAL STANDARD G: RESPIRATORY HEALTH

What is Occupational Respiratory Disease?

The respiratory diseases of construction workers may include pneumoconiosis arising from silica (silicosis) or asbestos exposure, asthma and other allergic reactions (e.g. due to isocyanate paint or resin exposure) and chronic obstructive pulmonary disease. Some exposures in the construction industry can give rise to an increased risk of cancer of the lung. Smoking may contribute to the respiratory damage and the risk of cancer and some allergic responses.

Occupational Asthma (OA) is an important occupational health problem with serious implications for both affected individuals and their employers. For the affected individual, continued exposure to the causative agent usually leads to deteriorating asthma and the risk of severe and potentially life threatening asthma attacks. Even if exposure ceases, the more severely affected individuals may still be left with persistent asthma and chronic disability.

Occupational exposure to silica in construction work occurs in concrete removal, demolition work, tunnel construction, concrete or granite cutting, drilling, sanding and grinding. Other people in the vicinity of such work may also be exposed. If workers are employed in occupations listed in ‘Health surveillance for those exposed to respirable crystalline silica (RCS)’ (G404, HSE 2006) health surveillance for silicosis should be considered. If the risk is low, it may be decided that health surveillance is unnecessary, but where there is a reasonable likelihood of silicosis developing then health surveillance will be appropriate. The decision must be made by the duty-holder, in the light of competent advice, taking account of current (and past) exposure circumstances. Health surveillance could require chest x-rays (at intervals, in addition to symptoms enquiries) and a baseline assessment would be appropriate. However, the benefits of such health surveillance need to be weighed against the risks associated with serial chest x-rays. Silica exposure is not only associated with an increased incidence of silicosis, but also chronic obstructive pulmonary disease (COPD) lung cancer and tuberculosis. It is good practice to monitor workers exposed to respirable crystalline silica for signs of COPD, which could include questionnaire and lung function testing and symptom enquiry may lead to early indications of tuberculosis. The Employer should also appoint a responsible person to report any symptoms that occur between tests.
COPD is a common chronic progressive lung disease which is mainly caused by smoking. It is a lung condition that encompasses chronic bronchitis (regular phlegm production) and emphysema (damage to the air sacs in the lung).

As well as smoking, COPD may be caused by chronic exposures to certain substances in the workplace such as Coal-mine dust, silica, flour dust, grain, wood dust, metal fumes, and irritating gases such as nitrogen oxides and sulphur dioxide. Where workers breathe in mists, dusts, vapours or gases from products labelled R34, ‘Causes burns’, R35 ‘Causes severe burns’ or R37 ‘Irritating to the respiratory system’ there may be a risk of COPD. In particular construction work, welding and stonemasonry may be associated with COPD.

COPD by definition results in slowly progressive irreversible decline in lung function. The main emphasis should therefore be on primary prevention, which is best achieved by smoking cessation, and the elimination or reduction of exposures to causative substances in the workplace. Where there is a strong evidence base for a link between specific exposures and COPD then statutory health surveillance will be appropriate (G401, HSE 2006).

Tuberculosis (TB) is an infectious disease caused by the bacterium Mycobacterium tuberculosis, also known as ‘the tubercle bacillus’ and one that shouldn’t be overlooked; The Health Protection Agency states that about 8000 new cases of TB are currently reported each year in the United Kingdom. Most cases occur in major cities, particularly in London.

There is no appropriated means of health surveillance for the various forms of lung cancer that may be associated with work in construction.

**What is Respiratory Health Surveillance?**

The specific concern of respiratory health surveillance is the early detection of adverse reactions to respiratory allergens. The risk of sensitisation, and the development of symptoms of occupational asthma, increases with the duration of exposure.

Spirometry measures how much and how quickly air can be expelled following a deep breath, it can help diagnose various lung conditions.

In spirometry there are two main types of test. Both measure the vital capacity of the lungs. Vital Capacity (VC) can be defined as the maximum volume of air in litres that can be exhaled steadily following maximum inspiration; this is a static test and is not
time dependant. VC is not a value used in surveillance, but may however be measured at the start of the session to familiarise the individual with the equipment. Forced Vital Capacity (FVC) can be defined as the volume of air that can be forcibly exhaled from the lungs following maximum inspiration. This is a dynamic test which is time dependant.

Measures of the amount of air that can be expelled following a deep breath, forced vital capacity (FVC), and the amount of air that can be forcibly exhaled in one second, forced expiratory volume in one second (FEV1), are the most useful numbers derived from spirometry. The ratio of FEV1 to FVC is often used to assess patients for airflow obstruction. It is normally 75 to 85 percent, depending on the patient's age. The ratio is reduced in obstructive diseases, while it is preserved or even increased in restrictive disorders. A lower than normal FEV1 is a sign that a lung disease may be present. A falling FEV1 is a sign that a person's lung disease is getting worse.

The "normal" values for FVC and FEV1 for a patient depend on the individual's age, gender, height, and race. They are higher for younger than for older people, higher for tall than for short individuals, higher for men than for women, and higher for whites than blacks or Asians. Therefore, the numbers are presented as percentages of the average expected in someone of the same age, height, sex, and race. This is called percent predicted. Any number smaller than 85 percent of the 'predicted' may be considered abnormal.

‘At a glance’ spirometry measurements:

<table>
<thead>
<tr>
<th>Measurements made in Spirometry</th>
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</thead>
<tbody>
<tr>
<td>Abbreviation</td>
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<tr>
<td>VC (SVC)</td>
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<tr>
<td>FVC</td>
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<tr>
<td>FEV1</td>
</tr>
<tr>
<td>FEV1% (FER)</td>
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</tbody>
</table>
### FEF 25-75%

**Forced Expiratory Flow between 25-75%**

Average expiratory flow rate at the middle part of forced expiration. It is a more sensitive indication of what is happening in the middle/lower airways, but is not as reproducible as FEV1. Normal in restrictive disease. (not though used in surveillance or monitoring)

### PEFR

**Peak expiratory flow rate**

Maximum rate of airflow achieved during expiration. (Not used in surveillance or monitoring; PEFR may though be used in monitoring the ongoing health of a diagnosed case of occupational asthma who is back in the workplace even if ostensibly protected from the responsible exposure.)

### Purpose of Respiratory Health Surveillance

At pre-placement:

Respiratory health surveillance should be undertaken at pre-placement on those employees whose occupations are known, by risk assessment, to involve exposure to respiratory hazards and where legislation requires it.

The purpose is:

- To determine the fitness to work with respiratory hazards and to provide a baseline, thereafter as part of a periodic health surveillance programme (where exposure to respiratory hazards is identified on risk assessment)
- To identify individuals at greater risk of becoming sensitised (atopy, allergic rhinitis)
- Identify individuals with an established condition where subsequent exposure to a respiratory sensitiser would be potentially detrimental to their health (asthmatics)
- Enable employers to implement appropriate control strategies for respiratory hazards by providing information on incidence and prevalence of occupational respiratory disease amongst their employees
- It also provides an opportunity to educate employees about the risk to health from respiratory hazards, the need to comply with workplace policies and procedures regarding exposure to respiratory hazards and the use of PPE.
Dependant on the risk, new employees’ respiratory health surveillance may be repeated at 6 weeks (high risk) and 12 weeks, and annually thereafter.

**Subsequent surveillance:**

Periodic health surveillance should be undertaken annually, and comprise of the surveillance relevant to the risk.

Respiratory health surveillance will cease when the employee is not longer exposed to hazards requiring surveillance or when employment is terminated. An exit test should be undertaken for all employees who have undergone a programme of respiratory health surveillance if an interval of 6 months has elapsed since their last health surveillance appointment.

The type of surveillance may vary depending on the hazard and exposure, i.e. respiratory questionnaire, lung function test or chest x-rays could be required as part of health surveillance for silicosis where indicated.

**Relevant Regulations LINK**

This list is not exhaustive:

- The Health and Safety at Work Act 1974
- The Management of Health and Safety at Work Act 1999
- The Disability Discrimination Act 1995
- The Data Protection Act 1998
- Access to Medical Reports Act 1988
- Access to Health Records Act 1990
- Control of Substances Hazardous to Health (COSHH) (2002)
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)

**Conducting Respiratory Health Surveillance:**

**Equipment / Documentation required:**

Respiratory questionnaire (Example forms are available to OHSP’s registered with CBH)
Respiratory health surveillance form (Example forms are available to OHSP’s registered with CBH)
Consent form (Example forms are available to OHSP’s registered with CBH)
Results of previous respiratory health surveillance / spirometry
Sphygmomanometer
Spirometer (calibrated in accordance with manufacturer’s instructions)
Disposable mouthpieces
Height measure / tape measure
Calculator
Fitness certificates / record of health surveillance
Peak flow meter (although recordings are used for diagnosis not for surveillance)
Peak Flow diary (if required)

Preparing for Spirometry

Prior to spirometry, the patient should be asked to avoid:
  Wearing restrictive clothes
  Smoking 24 hours before the test
  Vigorous exercise 30 minutes prior to the test
  Consuming alcohol 4 hours prior to the test
  Eating a large meal 2 hours prior to the test
  Taking short acting bronchodilators for 4 hours or Long acting Beta2-agonists for more than 12 hours (more commonly known as asthma 'relievers' or bronchodilators). They are drugs that relax and open up the airways (bronchi) in the lungs, which become narrowed during an asthma attack. The most widely known of these drugs are salbutamol (e.g. Ventolin, Volmax) and terbutaline (Bricanyl).
  Anticholinergenics for 6 hours or long acting anticholinergenics for 24 hours (an agent that inhibits parasympathetic neural activity by blocking the neurotransmitter acetylcholine. i.e. Tricyclic antidepressants)
  Sustained release Theophylline (a bronchodilator drug) for 24 hours.
(If however circumstances dictate the need for an individual to use these medications, it may then be preferable for the test to be postponed.)

**Procedure**

Introduce yourself

Confirm identity of employee

Explain purpose, process and procedure for Respiratory health assessment

Consent to undertake health surveillance should be obtained, the consent for should be signed by the individual and the OHSP, this should also include their consent for their clinical details to be held on the CBH database (see appendix 2 for example form)

Check documentation to identify exposure levels

Complete appropriate assessment form with individual, clarifying any points as necessary and paying attention to any persistent symptoms and whether they improve away from work. Also be aware of any existing respiratory or medical problems.

Enquire as to any contraindications, which are: haemoptysis, pneumothorax, unstable cardiovascular status, aneurysms, recent eye surgery, acute illness (e.g. nausea, diarrhoea), recent surgery to thorax or abdomen, pregnancy (1st or 3rd Trimester). The OHSP should be satisfied that the individual has been clinically stable for 4-6 weeks.

Check employee’s blood pressure

Record individuals age, gender at birth, ethnic origin, height and weight (weight is only an issue if BMI > 34).

**Undertake test:**

- Follow directions for type of spirometer used, i.e. complete the questions as per directions on the screen
- Ask the individual to sit, preferably in a chair with arms but without wheels for safety purposes.
- Demonstrate to the employee the ideal position of the mouthpiece, and how to perform the test as spirometry is an effort and technique dependant test.
- The British Thoracic Society (BTS) ([www.brit-thoracic.org.uk](http://www.brit-thoracic.org.uk)) guidelines recommend an individual should perform a minimum of: 1 x
VC, 3 x FVC (the best 2 tests being within 100mls or 5% of each other) with a maximum of 8 blows per session.

- VC: provide clear instruction to the individual, e.g. “What I would like you to do is to take a nice deep breath in, as deep as you possibly can until you cannot breathe in any more. Then seal your lips around the mouthpiece and blow out nice and steadily, for as long as you can.”
- FVC: When they are ready ask them to continue, again providing clear instruction to the individual, e.g. “What I would like you to do is to take a nice deep breath in, as deep as you possibly can until you cannot breathe in any more. Then seal your lips around the mouthpiece and blow out as hard and fast and as long as you can”, encourage them to keep exhaling until they have completely emptied their lungs.

**Determining the outcome**

Before assessing the results the OHSP should ensure that they include 2 FVC tests that are within 100ml or 5% of each other and that the volume time graphs are smooth, convex upwards and free from any irregularities.

A patient with normal spirometry results will have patent airways, no sign of obstruction and no disease process affecting the volume / capacity of the lungs. Their results will be within the normal range of predicted values for their demographics.

An obstructive pattern shows reduced flow rates and normal lung volumes, i.e. Normal FVC with lower than predicted FEV1 and ratio.

A restrictive pattern shows reduced volumes and normal flow rates, i.e. lower than predicted FVC and FEV1 and normal ratio.

A combined disorder shows reduced volumes and flow rates, i.e. lower than predicted FVC, FEV1 and ratio.

Employees who fail to produce results within the normal range and/or have respiratory symptoms should be referred to an OHP. Referral to their GP may also be necessary in order that treatment can be considered.

Please refer to The Industry Standards Part One for fitness criteria.

**Advice to Employee**

Ensure the employee is using the appropriate Personal Protective Equipment (PPE), provide relevant health education, and employee awareness leaflet.
Provide advice to both the employee and their manager on the recognition of the early signs and symptoms of occupational asthma or other respiratory symptoms. Employees should be advised to report any problems or changes noted between the health surveillance checks to their line manager.

**Advice to Employer**

It is recommended that if a diagnosis of Occupational respiratory disease is made by a doctor the employer should be advised of this fact with the employee’s consent and that in some cases it needs to be reported as a case of disease for the purposes of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995.

**Record keeping**

Appropriate occupational health notes should be completed with a record of health surveillance.

**Reports**

A Health Record should be set up, including:

- Employee Surname and forenames
- Gender
- Date of birth
- Permanent address and postcode
- National Insurance number
- Date of commencement of present employment

A historical record of jobs involving exposure to substances or processes requiring health surveillance in this employment.

It should also include conclusions of the spirometry and the date on which and by whom they were carried out. Conclusions should be expressed in terms of the employee’s fitness for task and will include the conclusions of the occupational health professional or responsible person, but NOT “confidential clinical data.”

The CBH database should be updated.
CLINICAL STANDARD H: HEARING

What is Noise Induced Hearing Loss?

Noise induced hearing loss (NIHL) is irreversible damage to the ears caused by exposure to high levels of noise. NIHL can be caused by a one-time exposure to loud sound as well as by repeated exposure to sounds at various loudness levels over an extended period of time.

What is Audiometry?

Audiometry is the measurement of hearing thresholds for pure tones of different frequencies. The purpose of which is to identify workers in the early stages of hearing loss and allow intervention before the loss becomes worse.

The audiogram is a graph which gives a detailed description of an individuals hearing ability and which can be described as a picture of their sense of hearing. The audiogram illustrates hearing ability by showing the individuals hearing threshold at various frequencies. Hearing threshold is an indication of how soft a sound may get before it is inaudible to the individual. A hearing threshold of between 0 and -25 dB is considered normal.

The vertical axis of the audiogram represents sound volume or intensity which is measured in decibels (dB). The more one moves down the axis, the louder the sound becomes. This corresponds to turning up the volume on a radio. Zero decibel at the top of the axis represents the softest sound a normal 18-30 year old is able to hear, and is not an indication that they cannot hear any sounds at all.

The horizontal axis of the audiogram represents sound frequency or pitch measured in Hertz (Hz). Sound frequency increases gradually the further one moves to the right along the axis. This movement can be compared to playing on the left side of a piano and gradually moving to the right side where the tone becomes more and more high-pitched. Frequencies between 500 Hz and 3000 Hz are most commonly used during ordinary conversation.

During a hearing test the results are usually recorded on the audiogram by means of red O’s for the right ear and blue X’s for the left one. The resulting red and blue lines show the hearing threshold for each ear, and the results may well differ.
HSE has devised a categorisation scheme for the interpretation of audiometry test (HSE guidance L108). Essentially each worker is categorised as ‘Category 1-acceptable hearing ability’, ‘Category 2- mild hearing impairment’, ‘Category 3-poor hearing’ or ‘Category 4-rapid hearing loss’. A worker within category 2 should be given a formal notification regarding the presence of hearing loss. Workers falling into categories 3 or 4, or workers with unilateral hearing loss, should be referred for further medical assessment according to the agreed procedure. The referral should be initially to the occupational doctor involved in the health surveillance programme. For those employees who fall into category 4 the frequency of testing will need to be more frequent than three yearly and may need to be more frequent in other categories.

**Purpose of Audiometry**

The purpose of audiometric health surveillance is to:

- warn when an employee might be suffering from early signs of hearing damage;
- give an opportunity to do something to prevent the damage getting worse;
- Check that control measures are working.

Health surveillance is a requirement under The Control of Noise at Work Regulations (2005) for those workers frequently exposed to noise over the upper exposure action value of 85 dB(A).

Other workers should have health surveillance provided where their exposure is either

1. between the lower exposure action value of 80dB(A) and the upper action value of 85dB(A), and the individual may be particularly sensitive to noise;
2. or only occasionally exposed above the upper exposure action value, and the individual may be particularly sensitive to noise.

Sensitivity may be indicated by audiometry results from previous jobs, medical history, history of exposure to noise above 85dB(A); or in a very few cases, a family history of becoming deaf early on in life.

Suitable health surveillance means regular hearing tests (audiometry testing over a range of sound frequencies), the maintenance of suitable records, informing workers about the state of their hearing and also the proper fitting, cleaning and maintenance
of any hearing protection used. Employees are required to co-operate with a health surveillance programme for noise by attending such hearing test appointments.

The individual(s) conducting the surveillance should be fully conversant with the technical and ethical aspects of audiometry and may be an occupational doctor, nurse with training in audiometry, an audiological scientist, or a trained audiometrician with access to a qualified occupational health medical professional for advice and onward referral, where necessary. They should have had appropriate training from a British Society for Audiology approved course for industrial audiometricians or equivalent level of competency.

**Frequency**

An audiometric programme should consist of a baseline audiogram conducted before employment [or free from noise exposure for at least 16-24 hours] where noise is a hazard, followed by a schedule of audiometric testing to monitor hearing threshold levels following exposure to noise at work. The schedule of audiometric testing should include annual tests for the first two years of employment and at three yearly intervals thereafter.

More frequent testing may be required [before the next scheduled routine test] if there is concern about changes in hearing thresholds, or where exposure conditions have altered, increasing the risk of hearing damage.

As a quality control measure, it would be prudent to repeat any audiogram which showed a difference from the previous result of more than 10 dB at any frequency.

Where a workforce is already exposed to noise before the audiometric programme begins, the baseline audiogram will simply be the first test to be made. If there is no evidence of hearing loss, subsequent testing can follow the suggested schedule above unless damage is detected.

More frequent testing may be required [before the next scheduled routine test] if there is concern about changes in hearing thresholds, or where exposure conditions have altered, increasing the risk of hearing damage.

Workers with test result in category 3 (poor hearing) and category 4 (rapid hearing loss) should be referred to an occupational doctor with experience in occupational audiology, or otherwise the employee’s GP.

**Relevant Regulations LINK**

This list is not exhaustive:
The Health and Safety at Work etc Act 1974
The Management of Health and Safety at Work Regulations 1999 (as amended)
The Disability Discrimination Act 1995
The Data Protection Act 1998
Access to Medical Reports Act 1988
The Control of Noise at Work Regulations (2005)
Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)

Conducting Audiometry

At the baseline examination it is important to obtain information about the individual's job, previous noise exposures and medical history. At all subsequent tests the individual should be asked about any changes in personal circumstances, work patterns and noise exposure, and any complaints relating to the ears or hearing. If changes are indicated, previous records should be revisited comparisons made and subsequent referral to an occupational Physician as necessary.

Temporary Threshold Shift [TTS]

It is difficult to exclude the possibility of TTS unless there is a prolonged (16 hour or more) period free from high noise levels before testing. The best approach to audiometry in relation to the problem of TTS is to seek to eliminate its influence as far as possible by:

- Conducting tests before high exposures to noise occurs or
- Advise employees to use additional hearing protection in the period before the test where noise exposure will be present

For quality control purposes it is particularly important to obtain a baseline that, as far as possible, is not contaminated by TTS. This reflects the importance of this initial test as a reference point for all future comparisons. If a client site is unable to provide a suitable environment for the first test the client’s employee should ideally go to a regional office for their audiogram.
Equipment / Documentation required

Noise questionnaire and health surveillance form (Example forms are available to OHSP’s registered with CBH)
Consent form (Example forms are available to OHSP’s registered with CBH)
Results of previous health surveillance / Audiometry
Audiometer
Auriscope / otoscope
Fitness certificates (Example forms are available to OHSP’s registered with CBH)

Procedure

Otoscopic examination of the ear is required immediately before the test to detect any major abnormality, or the presence of exudate or excessive wax which might affect the results. Lift the pinna up and back before carefully inserting the speculum to obtain a good view of the canal and drum. Keep a note of your observations.

Features of a normal ear drum:

- Colour pearly grey/semi-transparent
- Handle of malleus should be visible
- Cone of light should run parallel with jaw line

Note any scars, perforations, other abnormalities

Hygiene is important throughout otoscopy examination. Wash hands before and after ear inspection. Only use disposal specula.

Follow the manufacturer’s instructions on using the audiometer.

In order to ensure accurate results the tester should:

- Ensure the employee is fit for the test and is ready to concentrate
- Ensure equipment used is calibrated and response button works
- Provide simple instructions and ensure they are understood. For example: “You are going to hear faint sounds in either your right or left ear. As soon as you hear a sound, press the switch button. Release the button as soon as you think you no longer hear the sound”. Also see written instructions on the booth door.
Fit the headphones firmly and position them centrally over the ear canal. Remove any obstruction around the ears – hearing aid, glasses, jewellery etc. Incorrect positioning of earphone may produce a notch of 10dB at 6kHz

Not give clues to the signal presentation

Ensure that background noise is minimal and there are no distractions. Note on the audiogram any elevations in background noise

**Determining the outcome**

The initial assessment of an audiogram will normally be made by the person conducting the test. The tester should be familiar with the HSE categorisation scheme. If the tester is not an OH practitioner, experienced in audiometry they must notify the person responsible for the audiometric program about any test results that are:

- In HSE category 2, 3 and 4. (The results of previous audiograms should be available for comparison)
- Abnormal audiometry questionnaire / medical history
- Abnormal otoscopy examination.

Three calculations are made:

1. Sum of the hearing levels obtained at 1, 2, 3, 4 and 6 kHz for each ear. This calculation should be done for each ear separately. This sum of frequencies has been chosen as being representative of the effects of NIHL. Although this scheme recommends a sum of hearing levels at specific frequencies, it is important that audiometry is still conducted at 0.5 and 8 kHz.

   Category 1 [Acceptable hearing ability]. If the sum for both ears is below the warning level

   Category 2 [Mild hearing impairment]. If the sum for either ear exceeds or is equal to the warning threshold level for their respective age and gender

   Category 3 [Poor hearing]. If the sum exceeds or is equal to the referral level for either ear. The individual would require referral for further medical advice

2. Sum of 3, 4, and 6 kHz for each ear: to determine whether there has been a rapid loss in hearing since the last examination a sum of the hearing thresholds obtained at 3, 4 and 6 kHz should be made. If the previous test was performed within the last three years and an increase in hearing
threshold level of 30 dB or more then this individual would fall into category 4 - rapid hearing loss and require referral on for further medical advice.

3. Sum of 1, 2, 3 and 4 kHz for each ear: to determine whether the individual has any unilateral hearing loss that may be due to disease or infection. If the difference between ears is greater than 40dB the individual should be advised of the findings and referred to their GP.

Interpretation of an audiogram may highlight effects other than NIHL. Further tests will be required to ascertain the causes of any abnormal audiogram.

## THE HSE CATEGORISATION SCHEME

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>CALCULATION [FOR EACH EAR]</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>ACCEPTABLE HEARING ABILITY</td>
<td>Sum of hearing levels at 1, 2, 3, 4 and 6 kHz.</td>
<td></td>
</tr>
<tr>
<td>Hearing within normal limits.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Warning</td>
<td></td>
</tr>
<tr>
<td>MILD HEARING IMPAIRMENT</td>
<td>Sum of hearing levels at 1, 2, 3, 4 and 6 kHz. Compare value with figure given for appropriate age band and gender in Table below.</td>
<td></td>
</tr>
<tr>
<td>Hearing within 20th percentile, i.e. hearing level normally experienced by 1 person in 5. May indicate developing NIHL.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Referral to OHP</td>
<td></td>
</tr>
<tr>
<td>POOR HEARING</td>
<td>Sum of hearing levels at 1, 2, 3, 4 and 6 kHz. Compare value with figure given for appropriate age band and gender in Table below.</td>
<td></td>
</tr>
<tr>
<td>Hearing within 5th percentile, i.e. hearing level normally experienced by 1 person in 20. Suggests significant NIHL.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Referral to OHP</td>
<td></td>
</tr>
<tr>
<td>RAPID HEARING LOSS</td>
<td>Sum of hearing levels at 3, 4 and 6 kHz.</td>
<td></td>
</tr>
<tr>
<td>Reduction in hearing level of 30 dB or more, within 3 years or less. Such a change could be caused by noise exposure or disease.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### CLASSIFICATION OF AUDIOGRAMS - WARNING AND REFERRAL LEVELS

<table>
<thead>
<tr>
<th>Age</th>
<th>Males</th>
<th></th>
<th>Females</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Warning level</td>
<td>Referral level</td>
<td>Warning level</td>
<td>Referral level</td>
</tr>
<tr>
<td>18-24</td>
<td>51</td>
<td>95</td>
<td>46</td>
<td>78</td>
</tr>
<tr>
<td>25-29</td>
<td>67</td>
<td>113</td>
<td>55</td>
<td>91</td>
</tr>
<tr>
<td>30-34</td>
<td>82</td>
<td>132</td>
<td>63</td>
<td>105</td>
</tr>
<tr>
<td>35-39</td>
<td>100</td>
<td>154</td>
<td>71</td>
<td>119</td>
</tr>
<tr>
<td>40-44</td>
<td>121</td>
<td>183</td>
<td>80</td>
<td>134</td>
</tr>
<tr>
<td>45-49</td>
<td>142</td>
<td>211</td>
<td>93</td>
<td>153</td>
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<td>50-54</td>
<td>165</td>
<td>240</td>
<td>111</td>
<td>176</td>
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<td>55-59</td>
<td>190</td>
<td>269</td>
<td>131</td>
<td>204</td>
</tr>
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<td>60-64</td>
<td>217</td>
<td>296</td>
<td>157</td>
<td>235</td>
</tr>
<tr>
<td>65</td>
<td>235</td>
<td>311</td>
<td>175</td>
<td>255</td>
</tr>
</tbody>
</table>

#### Category 2:

Provides an early warning of damage in cases where hearing loss develops at a rate greater than might be expected due to age and gender, but where the referral criteria have not been reached.

#### Category 3 and 4:

Employees should be referred to a medical practitioner. The GP should be given a copy of the results and a covering letter including details about the employees work history, current job including exposure to noise, chemicals and noise control measures.

#### Unilateral hearing loss:

Employees will be referred to a medical practitioner.

Please refer to The Industry Standards Part One for fitness standards.
Advice to Employee

The results of each audiometry test should be explained to the worker, including the condition of their hearing, the significance of any hearing damage, the importance of compliance with the employer's noise-control and hearing protection programme and the need for any further referral.

All individuals should ideally be given leaflet on protecting your hearing at work

Referral to a GP is appropriate if an individual reports symptoms such as ear pain, discharge, dizziness, severe or persistent tinnitus, fluctuating hearing impairment or a feeling of fullness or discomfort in one or both ears.

Advice to Employer

The information provided to an employer about audiometry health surveillance will depend on the service level agreement with the employer. The following information is intended to guide OH practitioner decision making:

Employer responsibility:
The Control of Noise at Work Regulations [2005] states: Where, as a result of health surveillance, an employee is found to have identifiable hearing damage the employer shall:

- Ensure that the employee is examined by a doctor
- If damage is due to noise the employer shall ensure that a suitably qualified person informs the employee accordingly; review the risk assessment; review any measure taken to comply with regulations; take account any advice given by a doctor or occupational health professional.
- Consider assigning the employee to alternative work where there is no risk from further exposure to noise, taking into account any advice given by a doctor or occupational health professional
- Ensure continued health surveillance and provide for a review of the health of any other employee who has been similarly exposed.

Hearing loss and fitness to work in noisy environments
Following referral, if noise-induced hearing loss is deemed to be stable, continuing exposure to noise will usually be acceptable where adequate hearing protection is
used and where residual hearing ability is not so poor as to make the risk of further hearing loss unacceptable.

If it is difficult to determine the ability of a worker to hear safety instructions and auditory warning signals a functional assessment may be appropriate to determine an employee’s safety and the safety of others in the workplace. The functional assessment would be conducted by a manager / safety professional familiar with health and safety issues in the employee’s working environment.

An employer will ultimately determine if an employee should continue working in a noise hazard area. The role of the OH practitioner is to provide the employer with a competent assessment of an employee’s hearing in relation to their job and work environment. A competent assessment of an individual with significant hearing loss would include advice from a Hearing specialist.

If an employee has significant hearing loss they may fall within the remit of the Disability Discrimination Act 1995. Employers would be expected to take all reasonable practical steps to accommodate someone in the workplace. Such steps should never compromise the health and safety of the employee or others in the workplace.

**Record keeping:**

Appropriate occupational health notes should be completed with a record of health surveillance.

**Reports:**

A Health Record should be set up, including:

- Employee Surname and forenames
- Gender
- Date of birth
- Permanent address and postcode
- National Insurance number
- Date of commencement of present employment
- A historical record of jobs involving exposure to noise or processes requiring health surveillance in this employment.

It should also include results of the audiometry and the date on which and by whom it was carried out. Conclusions should be expressed in terms of the employee’s fitness
for task and will include the conclusions of the occupational health professional or responsible person, but NOT “confidential clinical data.”

The CBH database should be updated.
CLINICAL STANDARD I: HAND ARM VIBRATION

What is Hand Arm Vibration?

Hand Arm Vibration (HAV) is vibration transmitted from work processes into workers hands and arms. It can be caused by operating hand-held power tools (such as road breakers), hand-guided equipment (such as compactors), or by holding materials being processed by machines (such as pedestal grinders).

Regular and frequent exposure to HAV can lead to a combination of neurological, vascular and musculoskeletal symptoms, (collectively referred to as hand arm vibration syndrome [HAVS]) and also to carpal tunnel syndrome. This is most likely when contact with a vibrating tool or work process is a regular part of a person's job. Occasional exposure is unlikely to cause ill health.

Use of the following has been identified as causing HAVS:

- Road breakers
- Clay spaders / jigger picks
- Demolition Hammers
- Hammer drills/combi hammers
- Pneumatic stone working hammers
- Needle Scalers
- Angle grinders
- Chipping Hammers
- Chainsaws
- Sanders

What is HAVS?

HAVS affects the nerves and blood vessels of the hand. It can become severely disabling if ignored. It includes vibration white finger (VWF), which can cause severe pain in the affected fingers.

What is Carpal Tunnel Syndrome?

Carpal tunnel syndrome is a nerve disorder which may involve pain, tingling, numbness and weakness in parts of the hand, and can be caused by, among other things, exposure to vibration.
Identifying HAVS

Identifying the signs and symptoms at an early stage is crucial to preventing serious long-term health effects.

Indications of hand arm vibration syndrome are:

- in the cold and wet, fingers go white, then blue, then red and are painful (VWF) (Although cold is the usual trigger symptoms may occur when it is not a particularly cold day)
- loss of sensation in the fingers
- pain, tingling or numbness in the hands, wrists and arms
- loss of strength in hands (inability to pick things up or hold heavy objects)

What is the health surveillance for Hand Arm Vibration?

The Control of Vibration at Work Regulations (COVWR, 2005) has established the necessity for health surveillance at exposure action value (EAV) over an average eight hour working day, (A8) of 2.5 m/s² using triaxial measurements or where deemed necessary by risk assessment. The introduction of the lower EAV together with a reduction in the exposure limit value (ELV) of 5.0 m/s² means that many more workers will require health surveillance.

Where risk assessment has demonstrated a need for health surveillance, individuals have presented with symptoms or already have HAVS, then the tiered approach to HAVS (L140, HSE) should be followed. The tiered approach to health surveillance for HAVS includes the following elements:

Tier 1 Administration of a pre-placement Questionnaire
Tier 2 Administration of a Routine Questionnaire (Annually)
Tier 3 Nurse led clinical assessment
Tier 4 Diagnosis by a Doctor
Tier 5 Standardised tests (optional)

The current guidance has also suggested that health professionals (both doctors and nurses) conducting health surveillance for HAVS should have training from a Faculty of Occupational Medicine approved HAVS training course leading to a qualification approved by the Faculty or equivalent level of competency.
A suitable pre-placement questionnaire for hand arm vibration syndrome should be completed by the job applicant and returned directly to an occupational health provider for assessment (HSE Tier1). A decision on “fitness for work with exposure to hand transmitted vibration” should be recorded with any advised restrictions.

Within the health surveillance programme, a suitable questionnaire for HAVS should be completed by the employee and returned to the designated responsible person to file in the employee’s health record (HSE Tier 2). Where any questionnaires indicate possible symptoms, a copy should be forwarded to the occupational health provider with a referral for assessment (HSE Tier 3).

All individuals who are reporting symptoms should be seen by a qualified person for assessment of their condition (HSE Tier 3 and 4).

It is recommended that every third year (whether symptoms have been reported or not) that the employee should be assessed by a qualified person (nurse or doctor) (HSE Tier 3). Any positive findings should lead to referral to an appropriately qualified doctor so that a diagnosis of HAVS can be confirmed or excluded (HSE Tier 4). Provision should be made for referral for standardised tests if considered appropriate on the advice of the doctor (HSE Tier 5).

When an initial diagnosis of HAVS has been made (at any stage) the employer should be advised of this fact with the employee’s consent and this must then be reported as a case of disease for the purposes of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995.

**Purpose of health surveillance for Hand Arm Vibration**

- To identify and warn employees who might be suffering from an early stage of HAVS and report findings to management to enable steps to be taken to reduce the risk of HAVS.
- To identify whether there are adequate control measures in place to prevent HAVS by obtaining information on ill health, including anonymised grouped results.
- To ensure the employee receives appropriate medical assessment and support.
- Educate employees about the risk to health from vibrating tools and the need to comply with workplace policies and procedures regarding exposure to vibration at work, and the safe use of PPE.
Frequency of Assessments

- at pre-placement health assessment if the employee's job if they are at risk of vibration from any part of their job
- where employees are identified as being “at risk” of HAV via risk assessment undertaken by management
- if an employee consults occupational health/management complaining of symptoms which could be associated with HAVS
- Newly-exposed workers should be reviewed 6 months after commencing work with vibrating tools or earlier if there is any indication of HAVS developing.
- The HAVS screening questionnaire should be carried out annually. This may be done by a responsible person who has received training on HAVS or by an occupational health professional. If any signs or symptoms arise at this stage, then the employee must be referred to occupational health and seen by a suitably qualified OHA. More frequent assessment may be necessary for an employee with a diagnosis of HAVS.
- Regardless of whether signs/symptoms are identified at annual screening, all employees exposed to HAV should be seen by occupational health every 3 years.

Relevant Regulations LINK

This list is not exhaustive:

The Health and Safety at Work etc Act 1974

The Management of Health and Safety at Work Regulations 1999 (as amended)

The Disability Discrimination Act 1995

The Data Protection Act 1998

Access to Medical Reports Act 1988

The Control of Vibration at Work Regulations (COVWR, 2005)

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)
Conducting health surveillance for Hand Arm Vibration

The OHSP should first have decided at which tier the HAVS assessment is. i.e.:

- **Tier 1.** Short questionnaire used at a pre-placement stage. The questionnaires will be treated as medically confidential, and sent to the OHSP. Replies to this will determine whether an OH Assessment (tier 3) is indicated.

- **Tier 2.** Short questionnaire issued annually to employees exposed to vibration, to determine whether they need to be referred for tier 3 assessment. Tier 2 questionnaires may be processed by the ‘responsible person, (provided employees have consented to the system). If a tier 1 or 2 assessment does not identify any symptoms; referral to an OH Advisor is not indicated. However, if individuals who are exposed to hand transmitted vibration (HAV) have 3 ‘negative’ tier 2 assessments, they should be referred for a tier 3 assessment, to ensure symptoms are not being overlooked. (If no symptoms are reported, a concurrent Tier 4 assessment does not need to be booked).

- **Tier 3.** HAVS health assessment by a qualified person (e.g. OHA). If this suggests an individual has HAVS, they should have a Tier 4 assessment. In theory, if an individual has no evidence of HAVS, a Tier 4 assessment will not be indicated. Tier 3 will comprise of completion of a questionnaire, and a clinical examination. This is not a full medical examination, but a targeted assessment. It will involve assessment of vascular and neurological function, and also an assessment of musculo-skeletal disorders, grip strength and manual dexterity.

- **Tier 4.** This involves a formal diagnosis being made by a competent OH Physician, to allow advice on fitness to work, and reporting under RIDDOR. Accurate reporting under RIDDOR relies on an accurate diagnosis of HAVS by the OH Physician. The reported symptoms are the most important diagnostic information. The OH Physician may wish to confirm the history or findings of the Tier 3 assessment as part of the Tier 4 assessment.

- The doctor will provide the employer with an assessment of the individual’s fitness to work. If as a result of Tier 4 assessment, the OH Physician confirms HAVS at a sufficiently severe stage, consideration about ongoing
employment is required. This may involve job redesign or redeployment to an area where further exposure to HAV does not take place.

- **Tier 5.** This is optional, but involves referral to a specialist centre for testing. The results may help the doctor assess fitness for task. In addition to the clinical assessment of levels 3-4; it is possible to conduct standardised tests at specialist centres. These aim to provide a quantitative assessment of the severity of HAVS.

**Equipment / Documentation required**

HAVS screening questionnaire(s) (Example forms are available to OHSP’s registered with CBH)

HAVS health surveillance questionnaire (Example forms are available to OHSP’s registered with CBH)

Employee consent to undertake occupational health surveillance (Example forms are available to OHSP’s registered with CBH)

Results from previous health surveillance

Fitness certificate (Example forms are available to OHSP’s registered with CBH)

**Procedure**

Introduce yourself

Confirm identity of employee

Explain purpose, process and procedure for HAVS health assessment

Check documentation to identify exposure levels

Complete appropriate assessment form with individual, clarifying any points as necessary

Undertake examination

**Determining the outcome**

Subject to the outcome of the tiered approach and whether symptoms are reported this may lead on to diagnosis by a Doctor.

**Flow chart for health surveillance for HAVS (HSE guidelines, 2005):**

Level 1 & 2: Initial assessment using a screening questionnaire, if symptoms reported then move onto level 3.

↓

Level 3: Assessment, Clinical History and Examination by a Qualified Person, (OHA/OHP), if HAVS is suspected move onto level 4.
Level 4: Diagnosis by a Doctor

Level 5: Optional- Standardised Tests

Please refer to L140 for specific considerations for fitness for work with HAVS and to the CBH Industry Standards Part One for fitness standards.

Advice to Employee

Provide relevant health education, employee awareness leaflet, inform employee to notify Manager of any changes between health surveillance checks

Advice to Employer

When an initial diagnosis of HAVS has been made (at any stage) the employer should be advised of this fact with the employee’s consent and this must then be reported as a case of disease for the purposes of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995

Record keeping

Appropriate occupational health notes should be completed with a record of health surveillance.

Reports

A Health Record should be set up, including:

Employee Surname and forenames

Gender

Date of birth

Permanent address and postcode

National Insurance number

Date of commencement of present employment

A historical record of jobs involving exposure to processes requiring health surveillance in this employment.

It should also include results of the HAVS assessment and the date on which and by whom it was carried out. Conclusions should be expressed in terms of the
employee’s fitness for task and will include the conclusions of the occupational health professional or responsible person, but NOT “confidential clinical data.”

The CBH database should be updated.
**CLINICAL STANDARD J: BLOOD PRESSURE**

**What is abnormal Blood Pressure?**

Blood pressure is the pressure of the blood in the arteries. High blood pressure develops if the walls of the larger arteries lose their natural elasticity and become rigid, and the smaller blood vessels constrict.

The target blood pressure is below 140/85mmHg (140 systolic and 85 diastolic). In an individual with diabetes, kidney disease, or disease of the heart and circulation, their target is below 130/80mmHg. There is no fixed dividing line between normal blood pressure and slightly raised blood pressure. However, the British Hypertension Society suggests that the ideal blood pressure is 120/80mmHg, normal is less than 130/80mmHg, and ‘high-normal’ is 130/80 to 139/89mmHg.

High Blood pressure (Hypertension) if sustained can be damaging to the blood vessels, causing atherosclerosis (build up of fatty deposits in the lining of the arteries) and arteriosclerosis (thickening of the muscle wall of the blood vessels). This results in narrowing of the arteries and a reduced blood supply to the vital organs, particularly the brain, heart, kidneys and eyes. The risks of uncontrolled high blood pressure are:

- stroke,
- heart attack,
- heart failure (heart doesn’t pump effectively),
- angina,
- damage to the kidneys,
- damage to the eyes.

In some people who have blood pressure below 90/60mmHg, it can cause dizziness or even fainting when they get up after bending over or lying down.

It is therefore important that an individual that is carrying out safety critical work (SCW) is not suffering from uncontrolled high blood pressure or at risk of fainting due to low blood pressure.

**What is a blood pressure test?**

Blood pressure is usually measured using a digital blood-pressure monitor; some OHSPs may though still use a manual sphygmomanometer.

Two readings are taken:
The systolic pressure; this is the first and higher measurement. It is a measure of the blood pressure as the heart contracts and pumps blood out.

The diastolic pressure; this is the second and lower number. It is a measure of the blood pressure when the heart is relaxed and filling up with blood.

This should form part of a wider cardiovascular health assessment, involving both the use of questioning and clinical assessment, this can include the following:

- Symptom reporting such as undetermined chest pain
- Family history
- Past history
- Obesity levels (BMI >30)
- Inactivity
- Sleep apnoea
- Depression
- Work factors such as exposure to extremes of temperature
- Blood pressure as measured supine
- Fasting blood for Total and HDL cholesterol
- Urinalysis (diabetes)
- Cigarette smoking
- Age and gender

**Purpose of a blood pressure test / cardiovascular health assessment**

In the case of SCW the blood pressure is checked to identify any likely risk from cardiovascular disease, which may affect the ability to carry out a task due to a sudden incapacity such as from a heart attack or an arrhythmia, cardiovascular disease may also affect concentration and ability to control machinery due to onset of chest pain.

The blood pressure check would just form part of a health assessment for those undertaking SCW.

**Relevant Regulations LINK**

This list is not exhaustive:

- The Health and Safety at Work etc Act 1974
The Management of Health and Safety at Work Regulations 1999 (as amended)

The Disability Discrimination Act 1995

The Data Protection Act 1998

Access to Medical Reports Act 1988

**Conducting a Blood Pressure Check:**

**Equipment / Documentation required**

Cardiovascular questionnaire and health assessment form (Example forms are available to OHSP’s registered with CBH)

Consent form (Example forms are available to OHSP’s registered with CBH)

Results of previous check

Sphygmomanometer (with correct sized cuff).

Stethoscope (if not electronic sphygmomanometer used)

Watch with second hand if sphygmomanometer does not record pulse

Fitness certificates (Example forms are available to OHSP’s registered with CBH)

**Procedure**

Introduce yourself

Confirm identity of employee

Explain purpose, process and procedure for blood pressure check / health assessment

Check documentation to ascertain job role / SCW

Complete appropriate assessment form with individual, clarifying any points as necessary

Undertake blood pressure check:

The size of the cuff is important. If a cuff is too large, it can give an artificially low reading. Fat arms will need larger cuffs – otherwise the blood-pressure measurement will be higher than it actually is. Before checking blood pressure, the individual should have rested for at least five minutes. They should be sitting down when the measurement is taken.

**Determining the outcome**

Uncontrolled hypertension (diastolic remains > 110mmHg) is likely to cause health symptoms and / or sudden collapse, which could potentially endanger the safety of
others, this would then be a bar to SCW and the individual should be referred to their GP and may need to be further assessed by an OH physician.

Please refer to The Industry Standards Part One for fitness standards.

Advice to Employee

General health and lifestyle should be given as appropriate; if the blood pressure is consistently high they should be informed of the risk and the need to be seen by their GP. If they are to be barred from SCW the reason for this should be explained.

Advice to Employer

A fitness for task certificate should be supplied; this should not include any clinical information, just the fitness of the individual for the proposed work and whether any restrictions or adjustments are recommended.

Record keeping

Appropriate occupational health notes should be completed with a record of health assessment.

Reports

Conclusions should be expressed in terms of the employee’s fitness for task and will include the conclusions of the occupational health professional or responsible person, but NOT “confidential clinical data.”

The CBH database should be updated.
**CLINICAL STANDARD K: URINALYSIS**

**What is urinalysis?**
Urinalysis is a test(s) performed on a urine sample. A routine urinalysis usually includes colour, transparency, specific gravity, pH, protein, glucose, ketones and blood.

Urinalysis is used as a screening and/or diagnostic tool because it can help detect substances in the urine associated with different metabolic and kidney disorders. Substances such as protein or glucose will begin to appear in the urine before an individual is aware that they may have a problem.

**What could abnormal urinalysis indicate?**
Routine Urinalysis testing can show early signs and symptoms for the following diseases:

- Liver disease
- Renal disease
- Diabetes mellitus
- Hypertension
- Pre-eclampsia
- Biliary disease
- Renal stones
- Malignant tumour

**Purpose of urinalysis**
Routine urinalysis is performed for several reasons:

- General health screening to detect renal and metabolic diseases
- Diagnosis of diseases or disorders of the kidneys or urinary tract
- Monitoring of patients with diabetes

For the purpose of fitness to work in the Construction Industry, urine should be tested for the presence of glycosuria and protenuria to detect underlying disease as a minimum where an individual is undertaking SCW.

**Relevant Regulations LINK**
This list is not exhaustive:
The Health and Safety at Work etc Act 1974

The Management of Health and Safety at Work Regulations 1999 (as amended)

The Disability Discrimination Act 1995

The Data Protection Act 1998

Access to Medical Reports Act 1988

Conducting urinalysis:

Equipment / Documentation required:

Relevant health assessment form (Example forms are available to OHSP’s registered with CBH)

Consent form (Example forms are available to OHSP’s registered with CBH)

Results of previous health assessment

Toilet and hand washing facilities

Non sterile disposable Gloves

Urine pots

Urine test strips (Lab stix/ mutistix)

Biohazard waste disposal

Fitness certificates (Example forms are available to OHSP’s registered with CBH)

Procedure

- Introduce yourself
- Confirm identity of employee
- Check documentation to ascertain job role / SCW
- Complete appropriate assessment form with individual, clarifying any points as necessary
- Undertake urinalysis:

  The specimen collection procedure should be explained to the employee clearly and appropriately, taking into account his or her level of understanding and knowledge of medical language. This helps to ensure that the sample is collected properly, a crucial factor in obtaining accurate results.
When collecting specimens, OHSPs should be aware of the differences in cultural attitudes towards handling and collection of body fluids, and should be sensitive to any wishes the employee might have.

The employee’s privacy should be maintained at all times during the procedure.

The person carrying out the procedure should wear non-sterile gloves for his or her own protection and to prevent cross-contamination of the specimen.

The employee should be given the appropriate container for sample collection. This will be determined by how mobile the employee is, as well as the type of sample required (i.e. for testing on site, or for laboratory testing).

All employees should be offered hand-washing facilities after the sample has been collected.

It is useful to observe the urine before testing it with the reagent strip because its colour and odour can indicate disease. COLOUR- in its normal state, urine should be straw coloured and clear. CLOUDINESS or debris may indicate an increase in the number of abnormal cells, indicating the presence of disease. ODOUR- Freshly voided urine usually has practically no smell although it will smell strongly if the urine is concentrated because the patient hasn’t been drinking much fluid. Urine left standing for several hours has a slight smell of ammonia. Infected urine sometimes can have a ‘fishy’ smell. Ketoacidotic urine (urine with a high level of ketones present causing acid imbalance), or urine from anorexic employees, has a sweet ‘peardrop’ odour.

REAGENT STRIPS

Manufacturers produce single test strips to test only for, for example, the presence of glucose or protein or blood or one strip with multiple reagent areas can be used to test for several substances.

Follow the manufacturer’s instruction relating to storage and use of reagent strips. Slight differences might exist between strips from different manufacturers. Usually, the strips must be stored in the container provided, and kept dry using the desiccant (drying agent) provided in the storage bottle.

Check the expiry date on the bottle before using any strips.
Note any medications the employee is taking at the time of the test. Some preparations can alter the colour of urine, as well as reagent reactions. Beetroot may colour urine red.

**TESTING USING A STRIP**

- Dip the strip into the urine. Fluid should be allowed to cover all the reagent areas on the strip. Any excess urine should be wiped off on the edge of the specimen container.
- Lay the strip flat, on a dry surface, to prevent urine from the reagent areas mixing together.
- Dispose of the urine in a toilet once testing is complete.

**Determining the outcome**

Observe the reagent area(s) during the recommended reaction time. Manufacturers recommend time to reading for each type of test (e.g. between 1-2 minutes for protein) and this should be followed.

Changes on the reagent test area after this time may not have any diagnostic meaning. Use a watch to ensure each reading is taken accurately.

Compare the colour of reagent areas on the strip with the colour chart provided on the side of the bottle to read the results, once the recommended time has elapsed.

Please refer to The Industry Standards Part One for fitness standards.

**Advice to Employee**

The employee should be informed of the result, if there were any abnormalities detected the individual should be referred to their GP and may need to be further assessed by an OH physician.

If they are to be barred from SCW the reason for this should be explained.

**Advice to Employer**

A fitness for task certificate should be supplied; this should not include any clinical information, just the fitness of the individual for the proposed work and whether any restrictions or adjustments are recommended.

**Record keeping**

Appropriate occupational health notes should be completed with a record of health assessment.
Reports

Conclusions should be expressed in terms of the employee’s fitness for task and will include the conclusions of the occupational health professional or responsible person, but NOT “confidential clinical data.”

The CBH database should be updated.
CLINICAL STANDARD L: VISUAL ACUITY

What is Visual Acuity?

Visual acuity refers to the sharpness of one’s eyesight. For the purposes of this Standard, visual acuity may simply be defined as the best obtainable vision with or without glasses or contact lenses. The visual acuity standard can be met with or without corrective spectacle lenses or contact lenses. Persons who require glasses to perform duties should be classed as Fit for Work subject to review and reviewed at an appropriate time interval depending on the underlying condition.

Visual fields
Adequate visual fields are important for Safety Critical Work and peripheral vision is particularly important in certain common driving tasks, such as use of side mirrors. Visual fields may be reduced as a result of head trauma, brain tumour, stroke or cerebral infarction. Visual field losses also occur in eye diseases such as retinitis pigmentosa, a not uncommon inherited degeneration of the retina that causes significant visual field loss by the age of 30. Conditions such as glaucoma, optic atrophy, retinal detachment and localised retinal or choroidal infection can also reduce visual fields. Good rotation of the neck may also be necessary to ensure adequate overall fields of vision, but this requirement will vary depending on the particular driving task. (Refer to Standard E - Musculo Skeletal Assessment).

Any person who has or is suspected of having a visual field defect should be referred for expert assessment by an optometrist or ophthalmologist. As a minimum, a horizontal fields test of 85% should be achieved.

Binocular vision is required for all Safety Critical Work. Controllers who require only a limited field of vision may be exempted.

Purpose of Vision Screening

The purpose of vision screening is to identify individuals with possible visual defects at the earliest possible stage in order to refer for diagnosis and treatment, if required. This is especially relevant with SCW, i.e. driving, where a defect in an individual’s vision may affect their own safety or that of others.

What is vision screening?

Vision screening is a simple method of identifying any visual defects but does not replace a test with an optician.
Acuity should be tested using an appropriate visual acuity chart (Snellen chart or equivalent), Keystone or a software package.

A Snellen chart is an eye chart used to measure visual acuity. Snellen charts are named after the Dutch ophthalmologist Hermann Snellen who developed the chart in 1862.

The traditional Snellen chart is printed with eleven lines of block letters. The first line consists of one very large letter, which may be one of several letters, for example E, H, N, or A. Subsequent rows have increasing numbers of letters that decrease in size. The symbols on an acuity chart are formally known as "optotypes." In the case of the traditional Snellen chart, the optotypes have the appearance of block letters, and are intended to be seen and read as letters. They are not, however, letters from any ordinary typographer's font. They have a particular, simple geometry in which:

- the thickness of the lines equals the thickness of the white spaces between lines and the thickness of the gap in the letter "C"
- the height and width of the optotype (letter) is five times the thickness of the line.

Only the ten letters C, D, E, F, L, N, O, P, T, Z are used in the traditional Snellen chart.

**Relevant Regulations LINK**

This list is not exhaustive:

- The Health and Safety at Work etc Act 1974
- The Management of Health and Safety at Work Regulations 1999 (as amended)
- The Disability Discrimination Act 1995
- The Data Protection Act 1998
- Access to Medical Reports Act 1988
Conducting a Vision Screening

Equipment / Documentation required
- Relevant questionnaire (Example forms are available to OHSP’s registered with CBH)
- Consent form (Example forms are available to OHSP’s registered with CBH)
- Results of previous vision screening
- Fitness certificates (Example forms are available to OHSP’s registered with CBH)
- Appropriate chart or equipment

Procedure
- Introduce yourself
- Confirm identity of employee
- Check documentation to ascertain job role / SCW
- Complete appropriate questionnaire with individual, clarifying any points as necessary
- Undertake vision screening:

The OHA will perform an initial screening test using a vision screening machine (e.g. keystone) to determine whether the employee has defective vision at distance and near vision. Where such a defect is identified, the employee will be advised to attend an optician for a full eye and eyesight test.

The OHA should test the employee's vision both with and without corrective appliances.

If using a Snellen Chart, the minimum illumination should be 480 lx to avoid making the test results invalid. The standard chart distance is six meters.

The visual acuity should be measured with one eye occluded and without correction. If correction is normally used when working then vision should be retested with corrective lenses and the corresponding results recorded.

The individual should therefore be asked to cover one eye, and read aloud the letters of each row, beginning at the top. The smallest row that can be read accurately indicates the patient's visual acuity in that eye.

Determining the outcome

If using a Keystone, or similar, the criteria is defined as to the acceptable levels for near, distance and middle vision.
If using a Snellens chart the visual acuity is stated as a fraction: the distance from the chart - 6 metres - is the numerator; the distance at which a 'normal eye' would be able to read the last line that the patient is able to read is the denominator. For example, 6/6 vision signifies normal vision i.e. a patient can read a line of symbols at six metres that a person with 'normal visual acuity' would be able to read at six metres.

A person with poor vision may have e.g. 6/10 vision i.e. they are able to read at 6 metres what a person with normal vision can read at 10 metres.

A person with better than normal vision will have a denominator that is less than 6 e.g. 6/5 i.e. a person with this grading of visual acuity can read at six metres what a person with normal visual acuity can only read at 5 metres.

Please refer to The Industry Standards Part One for fitness standards.

**Advice to Employee**

If further testing is required the employee will be advised to see an optician for a full eyesight test. A repeat appointment should be made for an eyesight test following the optician’s appointment.

Employees should be advised on good practice regarding visual acuity and the responsibilities of reporting symptoms.

**Advice to Employer**

Results should be given to the employer as a record of health surveillance in strict accordance with medical confidentiality guidelines

**Record keeping**

Appropriate occupational health notes should be completed.

**Reports**

In the case of SCW, conclusions should be expressed in terms of the employee’s fitness for task, but NOT “confidential clinical data.”

The CBH database should be updated.
CLINICAL STANDARD M: VISUAL ACUITY (DISPLAY SCREEN EQUIPMENT (DSE) USERS)

What is Visual Acuity?

Visual acuity refers to the sharpness of one’s eyesight. For the purposes of this Standard, visual acuity may simply be defined as the best obtainable vision with or without glasses or contact lenses.

What is Vision Screening for DSE users?

Within The Health and Safety (Display Screen Equipment) Regulations 1992 (DSE Regulations), there is no interpretation of the term appropriate eye and eyesight test, however, HSE guidance on the regulations states that the appropriate eye and eyesight test in Regulation 5 means a sight test as defined in the Opticians Act 1989. This broadly defines the objectives of sight testing as determining whether there is any defect, what the defect is, and correcting it by an optical appliance.

A basic screening test on its own does not satisfy the requirement in Regulation 5 for an appropriate eye and eyesight test. A suitable vision screening test however carried out under the supervision of a doctor and accompanied by an eye examination by the doctor would satisfy Regulation 5. No detailed specifications have been produced for vision screening test methods, nor machines that would comply with the recommendations in paragraph 54 of the HSE guidance booklet L26 Display screen equipment work. Any method that accurately tests vision at the distance at which the screen is viewed would be acceptable and there are a number of screening machines that do this. New methods have been developed for generating a test sequence on the user's own display screen by means of software. In principle this could have advantages in that viewing distances and lighting conditions would automatically be typical of those used for work, but as yet there is no information on the effectiveness of the actual test.

If employers are found using screening tests which do not comply with the guidance, this would not necessarily imply a breach of the regulations. As with other HSE guidance employers are free to deviate from its recommendations, provided they are complying with their duties under the regulations, ie, they are offering eye and eyesight tests by an optometrist or doctor to users who request them. (The Health and Safety (Display Screen Equipment) Regulations 1992 - additional briefing on reg. 5 - eye and eyesight tests)(HSE)
Many Employers operate an eye care voucher system which enables them to meet the legal requirement of providing eye examinations and corrective spectacles for employees working with DSE.

**Purpose of Vision Screening**

Although there is good evidence that work with DSE does not cause any permanent damage to eyes or eye sight, complaints of temporary discomfort, eye strain and headaches are common. As with any work that is visually demanding, users with existing uncorrected vision defects are more likely to suffer fatigue and stress whilst undertaking DSE work. The eye tests and corrective appliances provided under reg. 5 are therefore intended to be a means of alleviating such problems.

**Relevant Regulations LINK**

This list is not exhaustive:

- The Health and Safety at Work etc Act 1974
- The Management of Health and Safety at Work Regulations 1999 (as amended)
- The Disability Discrimination Act 1995
- The Data Protection Act 1998
- Access to Medical Reports Act 1988
- The Health and Safety (Display Screen Equipment) Regulations 1992
Conducting the Vision Screening

Equipment / Documentation required
- Relevant questionnaire (i.e. Keystone)
- Consent form (Example forms are available to OHSP’s registered with CBH)
- Results of previous vision screening
- Fitness certificates (Example forms are available to OHSP’s registered with CBH)
- Appropriate equipment that measures middle distance (i.e. Keystone)

Procedure
- Introduce yourself
- Confirm identity of employee
- Check documentation to ascertain job role and determine they are a DSE user
- Complete appropriate questionnaire with individual, clarifying any points as necessary
- Undertake vision screening:

Determining the outcome
The result of the screening is defined by the manufacturer. Any individual who does not meet the required standard, or who is symptomatic, should be referred to see an optician.

Advice to Employee
Where a visual defect is identified, the employee should be advised to attend an optician for a full eye and eyesight test.
Employees should be advised on good practice regarding work station set up and position as per the guidance documentation, including recommendations for regular changes of vocal length / activity. They should be provided with a DSE information leaflet as necessary.

Advice to Employer
The outcome should be given to the employer in strict accordance with medical confidentiality guidelines and subject to local policy regarding referral to see optician if required.

Record keeping
Appropriate occupational health notes should be completed.
The CBH database should be updated.
**Clinical Standard N: Colour Perception**

**What is Colour Vision?**

Colour vision is the ability to distinguish between certain colours. Deficiency is more common in men, affecting about one in 20. The most common form is red/green deficiency.

For employees whose colour vision is important for safety-critical purposes, colour vision testing is crucial in deciding on their fitness for task. Sometimes colour perception deficiency occurs because of diseases such as macular degeneration or from side effects of medicines, hence the necessity to retest periodically.

**What is a Colour Vision Test?**

There are two routinely used colour vision tests these are the Ishihara and the city University Test. The Ishihara test assesses colour vision, using a series of pseudoisochromatic plates on which numbers or letters are printed in dots of primary colours surrounded by dots of other colours; the figures are discernable by individuals with normal colour vision. The City University Test screens for colour vision defects and assess the severity of the defect using the ability to discriminate between different coloured spots. Where good red/green vision is required then the Ishihara is appropriate. However, where a mild/moderate colour vision deficiency can be tolerated then the City University diagnostic test is appropriate.

**Purpose of Colour Vision Testing**

To identify whether an individual who is undertaking SCW, has reduced ability to distinguish between certain colours that may subsequently have an adverse affect on his / her ability to safely perform a task that requires colour distinction, i.e. electrician. Subjects who pass the City University test but fail the Ishihara plate test are likely to have practical difficulties with only the most demanding colour discrimination tasks in an occupational context.

**Relevant Regulations LINK**

This list is not exhaustive:

- The Health and Safety at Work etc Act 1974
- The Management of Health and Safety at Work Regulations 1999 (as amended)
The Disability Discrimination Act 1995

The Data Protection Act 1998

Access to Medical Reports Act 1988

**Conducting a Colour Vision test**

When undertaking colour vision testing, the examiner must have received appropriate training in colour vision testing and interpretation of results.

**General testing criteria**

When performing a colour vision test, the examiner must ensure that the subject is wearing the vision aids that he/she is normally required to wear, e.g. clear spectacles or contact lenses.

Tinted lenses are not permitted since they alter colour vision.

The examiner should also be screened, assessed and classified as having normal colour vision prior to testing others. The correct type and intensity of illumination as specified is essential as it has been shown that colour-defective people can ‘pass’ clinical tests under differing illumination conditions.

The spectral content of the illumination in the test area affects colour appearance and can therefore alter the effectiveness of colour vision testing. It is vital to ensure that the lighting levels in the test area are adequate. The test area should have either a natural north sky illumination (in the northern hemisphere), or artificial natural daylight fluorescent illumination, i.e. standard source C lighting. The light source should provide a minimum of 200 lux at the surface of the test for young subjects. However, the City University test (Third edition) recommends a level of about 600 lux for adults and increased values for those over 50. Ideally, the light source should be at an angle of 45° above the plate surface.

Tungsten lighting is unsuitable.

Test books should be closed when not in use and stored in their box away from direct sunlight.

Plates should not be touched by subjects.

Each eye should be tested separately where an acquired defect is suspected.

The Ishihara plate test consists of either 24 or 38 colour plates. It is the most widely used screening test for red-green deficiency and has been shown to be the most...
efficient test for this purpose. A very general indication of protan and deutan defects is given in this test, but it is not, as such, a diagnostic test. The test does not screen for blue tritan defects and is unsuitable for testing acquired defects. The 38-plate edition of the test contains five types of design; 25 plates have numerals; 13 plates have pathway designs that are intended for use with non-verbal subjects.

A test manual is provided, but the examination instructions lack clarity. There is no record sheet and the examiner has to understand the principles of the test. These are not difficult to appreciate if the examiner has normal colour vision. The test is easy to use; however, interpretation of results is not always easy if only a few plates are failed.

The City University test is a two part test. Part one of the test consists of four charts that are used to indicate any colour vision defect. This part takes 30 seconds. Each chart has four vertical columns of three coloured spots and the subject must identify the presence and position of any different coloured spot within the column. Part two displays a central colour and four peripheral colours. The subject selects one of the outer colours which 'looks most like the central colour'. This part takes 40 seconds. Protan, deutan and tritan colour deficiency can be classified for both acquired and inherited defects. In part one, normal subjects should detect a total of 9-10 spots correctly on each chart. Deutans and protans should score a total of 4 or 5 missing spots, which are indicated in the instructions. Tritans are likely to score 7 and should, as with deutans and protans, miss the spots indicated in the instructions. In part two, the degree of defect is indicated by the number of errors, with a very mild defect showing few errors and an extreme defect making a maximum number of errors. Part two of the test differentiates based on the error rate between the three main types of colour defect.
Equipment / Documentation required

- Relevant questionnaire
- Consent form (Example forms are available to OHSP’s registered with CBH)
- Results of any previous screening
- Fitness certificates (Example forms are available to OHSP’s registered with CBH)
- The Ishihara test plates or City University Test (3rd Edition)

Procedure

- Introduce yourself
- Confirm identity of employee
- Check documentation to ascertain job role and determine whether they undertake SCW
- Complete appropriate questionnaire with individual, clarifying any points as necessary
- Undertake test:

The test plate can be hand held or placed on a table at ‘arm’s length’, approximately 66 cm from the eye. Ideally, daylight illumination or a suitable alternative should be at 45° to the plate surface, i.e. not directly above.

The examiner instructs the subject to ‘Tell me the numbers that you can see as I turn the pages. Sometimes you will not see a number and then I will turn to the next page’.

The examiner turns the pages, keeping control of the viewing time.

About four seconds are allowed for each plate.

Undue hesitation can be a sign of slight colour deficiency.

The Ishihara plates can be purchased readily, and occasionally people try to learn the correct responses in advance of the test. If this is suspected, the plates should be shown in a different order.

Determining the outcome

Most colour-deficient people make 12 or more errors on the 16 transformation and vanishing designs; with 99% of colour deficients identified on a minimum of six errors. This pass/fail criterion is adequate as a screening formula to determine colour deficiency. Some subjects with normal colour vision make one or two interpretative mistakes but errors and mis readings differ qualitatively.
The hidden-digit plates only identify about 50% of colour deficient people and need not be shown. Most dichromats (who make up around 3% of the male population) and all severe anomalous trichromats cannot see numerals on any plate after the introductory design and other tests are then needed to classify the defect for severity and type.

Where colour perception is a Safety Critical component of their role, the employee should not show red / green deficiency using Ishihara plates.

Please refer to The Industry Standards Part One for fitness standards.

Advice to Employee

If the test does identify a red / green deficiency using the Ishihara plates, and colour perception is a component of a Safety Critical role, the employee should be informed.

Advice to Employer

Conclusions should be expressed in terms of the employee’s fitness for task and will include the conclusions of the occupational health professional but NOT "confidential clinical data."

Record keeping

Records of the test results should be kept and detailed listings of parts of tests which have been failed should be recorded by the examiner. Appropriate occupational health notes should be completed.

The CBH database should be updated.

Source and suggested further reading MS7 ‘Colour vision examination, a guide for occupational health providers’ HSE.
**CLINICAL STANDARD O: BIOLOGICAL MONITORING**

**What is Biological Monitoring?**

Biological monitoring (BM) can be used as part of health surveillance to measure and assess the take-up or the effects of, exposure to substances by testing blood, urine or breath samples. The need for biological monitoring will be identified by risk assessment.

For the construction industry this may include:

- Urine sampling for Isocyanates
- Blood lead sampling for workers exposed to Lead fume

**What is the test for biological monitoring?**

The test involves a sample of blood, urine or breath. For example; isocyanate exposure - a urine sample is needed for BM.

**Purpose of biological monitoring**

If the need has been identified by risk assessment BM is used to assess exposure to certain hazards by the measurement of a chemical or its breakdown products, therefore the control measures can be reviewed.

BM is unique because it can measure how much of a chemical has actually entered a person's body, rather than how much is in the environment around them. Control of exposure to isocyanates usually relies on engineering controls such as spray booths and respiratory protective equipment such as air fed breathing systems. By using BM you can tell whether control measures like these are working and being used correctly.

**Relevant Regulations LINK**

This list is not exhaustive:

- The Health and Safety at Work etc Act 1974
- The Management of Health and Safety at Work Regulations 1999 (as amended)
- The Disability Discrimination Act 1995
- The Data Protection Act 1998
Access to Medical Reports Act 1988

Control of Lead at Work Regulations (CLAW) 2002


Control of Substances Hazardous to Health Regulations (COSHH) 2002

**Conducting Biological Monitoring:**

Urine Sampling For Isocyanates

An analysis of breakdown products of isocyanates in urine is required. The method can measure exposure to HDI, TDI, MDI and IPDI, either separately or as mixed exposures. Samples should be taken immediately post-shift (or post-exposure, if exposure is intermittent or 'task-based'). If sampling is for TDI or a mixture of isocyanates, samples should be collected in special bottles containing citric acid.

It is important to realise that BM analysis does not give any information about health effects; instead it is a measure of the overall effectiveness of exposure control measures. Nevertheless it is important that the purpose of BM is clearly explained to each individual taking part and that their informed consent is obtained. Biological Monitoring is part of the health surveillance programme to ensure control measures are adequate.

Urine Testing:

The Health and Safety Laboratory (HSL) can provide sample collection kits (including special citric acid bottles if these are required) and packaging materials. They also supply full instructions for sending samples through the post in accordance with legal requirements. This is all included in the standard price of the analysis. (Please refer to guidance within Standard K Urinalysis)

Lead

The Control of Lead at Work Regulations 2002 (CLAW) apply to all work which exposes persons to lead in any form such that it may be ingested, inhaled or otherwise absorbed. Only an Appointed Doctor can perform Medical Surveillance under CLAW for significantly exposed persons. Inhalation is the major source of absorption; therefore many of the regulations are orientated towards preventing the inhalation of lead dust, fume and vapour.

Lead poisoning can give symptoms of loss of appetite, constipation, anaemia, headaches, muscular and joint pains, colic and encephalopathy.
Personal hygiene has an important role in controlling lead absorption, thus the provision and use of adequate washing facilities is a basic requirement. Food and drink should not be consumed in any place liable to be contaminated by lead - adequate, alternative arrangements should be made.

Employees should be given adequate information and training regarding hazards, precautions and duties under the Regulations.

**Taking blood for BM**

Blood from veins should be taken only by those who have been properly trained in phlebotomy.

**Equipment / Documentation required**

- Relevant questionnaire
- Consent form

In addition the consent should ensure that the individual:

- understands what the test results mean and what action might be taken on the basis of them;
- can decide who has access to their result (for example, OHSP, safety representative, health and safety manager);
- can decide, for example, whether people see your individual result or whether your result is anonymous and pooled with other people's results;
- understands the sample they provide will only be analysed for the chemical (or breakdown products of it) that you are exposed to at work;
- that the result of the test will not affect their conditions of employment.

All necessary phlebotomy equipment

- Tourniquet: consider the quick release type
- Non-sterile gloves
- Apron
- Alcohol wipe (for blood culture samples)
- Bactericidal alcohol hand rub, for example, Hibisol®
- Requisition forms and blood specimen bags
- Blood specimen tubes
Sterile needle, size (gauge) appropriate to
the vein and sampling needs, using the smallest possible (RCN 2003)
Cotton wool ball – non-sterile
Tray or trolley
Sterile hypoallergenic plaster
Sharps’ disposal bin
appropriate packaging

Procedure
- Introduce yourself
- Confirm identity of employee
- Check documentation to ascertain job role and determine exposures
- Complete appropriate questionnaire with individual, clarifying any points as necessary
- Wash hands thoroughly with liquid soap, dry, followed by a healthcare-associated alcohol hand rub, or wash with an infection approved antiseptic solution
- Take the sample in accordance with best practice guidance, i.e. NMC / GMC
  - Select a suitable site for venepuncture
  - Prepare the equipment, the employee and the puncture site.
  - Perform the venepuncture.
  - Collect the sample in the appropriate container.
  - Recognise complications associated with the phlebotomy procedure.
  - Assess the need for sample recollection and/or rejection.
  - Label the collection tubes at the bedside or drawing area.
  - Promptly send the properly labelled specimens with the requisition to the laboratory.

Determining the outcome
The Health and Safety Executive (HSE) have introduced biological monitoring guidance values into their publication Guidance Note EH40 - 'Occupational Exposure Limits'. These guidance values are intended to assist in the interpretation of biological monitoring results with respect to occupational exposure.

In the 2005 edition of EH40 there is now only one list of benchmark guidance values. (BMGVs) which now has entries for 16 chemicals. Each one has an information sheet
outlining the monitoring method to be used and other details. These information sheets can be supplied by HSL, on behalf of HSE, on request.

In October 2005, for example, HSE endorsed a Biological Monitoring Guidance Value of 1 μmol isocyanate-derived diamine/mol creatinine - *Method for Isocyanate Metabolites in Urine*. Any BM results should be below this value. If BM results exceed this, employers should examine control measures (booths, masks, filters) and working practices and make any necessary improvements and re-test. If BM results are below the guidance value, annual testing is recommended.

Please refer to The Industry Standards Part One for fitness standards.

**Advice to Employee**

Appropriate health education should be given to the employee, including the use of PPE, personal hygiene etc.

**Advice to Employer**

Conclusions should be expressed in terms of the employee's fitness for task and will include the conclusions of the occupational health professional but NOT “confidential clinical data.” If the results indicate that sufficient control measures are not in place this should be reported to allow for review.

**Record keeping**

Appropriate Occupational health records should be completed with a record of health surveillance.

The CBH database should be updated.
**CLINICAL STANDARD P: WORK-RELATED STRESS / MENTAL HEALTH FITNESS**

**What is Mental Health?**

The Canadian Mental Health Association describes mental health as “a state of psychological and emotional well-being that enables an individual to work, love, relate to others effectively, and resolve conflicts”.

Mental health is about how we think, feel and behave. One in four people in the UK have a mental health problem at some point in their lives that affects their daily life, relationships or physical health.

Mental health problems can affect anyone at any age, regardless of race, gender or social background. Mental health disorders take many different forms and affect people in different ways. Depression schizophrenia and personality disorders are all types of mental health problem.

There is no single cause of mental health problems; the reasons why they develop are as complex as the individual. Mental health problems are more common in certain groups, for example, people with poor living conditions. (NHS Direct)

**What is Stress?**

There are many definitions of stress, but probably the most widely used definition of work-related stress is that of the HSE, who define it as ‘the adverse reaction people have to excessive pressures or other types of demand placed on them’.

There is a difference between stress and pressure. Everybody needs a certain amount of pressure for motivation and to perform at their best. It’s when there is too much pressure without recovery time that people start to experience stress.

HSE has produced Management Standards and guidelines on work-related stress for employers and employees and their representatives (available at [www.hse.gov.uk/stress](http://www.hse.gov.uk/stress))

Work related stress is not an illness, but it can lead to increased problems with ill health, if it is prolonged or particularly intense. Examples are heart disease, raised blood pressure, regular headaches, back pain, gastrointestinal disturbances and various minor illnesses. Psychological effects can be anxiety and depression.

Regulation 3 of the Management of Health and Safety at Work Regulations 1999 require employers to assess risks to health and safety at work. This includes the risk
of employees developing stress-related illness; however assessment is more complicated than for physical hazards, although it involves the same basic principals.

No specific health surveillance criteria exists with regards to stress, however regular reviews of employee attendance records may enable stress related illness or absenteeism to be identified. If however the individual undertakes SCW they should be assessed in relation to their mental health.

Employers should be aware to look for situations or activities that are likely to cause work related stress and carry out a suitable risk assessment, and consider stress when reviewing risk assessments. They should ensure that management teams have the ability to recognise and deal with stress related problems satisfactorily or are aware of action to take should this be identified as an issue.

**Purpose of Mental Health assessment:**

To identify any serious mental health problem in an individual who is undertaking SCW, whereby any such problem could have the potential to affect their own safety or that of others, and therefore allow for that risk to be managed.

**What is the assessment for mental health?**

By initial questionnaire; including past medical history, assessment of mood, observation and using various criteria to establish mental health status. If this highlights any cause for concern the individual should be referred for full assessment with an OHP and/or psychiatrist.

**Relevant Regulations LINK**

This list is not exhaustive:

- The Health and Safety at Work etc Act 1974
- The Management of Health and Safety at Work Regulations 1999 (as amended)
- The Disability Discrimination Act 1995
- The Data Protection Act 1998
- Access to Medical Reports Act 1988
Conducting Mental Health Assessment:

Equipment / Documentation required

- Relevant questionnaire (Example forms are available to OHSP’s registered with CBH)
- Consent form (Example forms are available to OHSP’s registered with CBH)
- Results of any previous screening
- Fitness certificates

Procedure

- Introduce yourself
- Confirm identity of employee
- Check documentation to ascertain job role and determine whether they undertake SCW
- Complete appropriate questionnaire with individual, clarifying any points as necessary and make assessment of the individuals apparent mental health status, i.e. their articulation, expression, eye contact etc.

Determining the outcome:

If the questionnaire and subsequent assessment of the individual does identify any mental health concerns, and they do undertake SCW, an onward referral should be recommended to an OHP / Psychiatrist. If however the assessment reveals a serious mental health concern, where the individual, by undertaking SCW, could pose a risk to the health and safety of themselves or to anyone else, it may be necessary to bar them from SCW until a thorough assessment is made and further medical evidence obtained.

Please refer to The Industry Standards Part One for fitness standards.

Advice to Employee:

If concerns are highlighted the employee should be informed that a more detailed assessment is recommended with an OHP / Psychiatrist. If a serious mental health problem is identified the employee should be informed of your intention to recommend they are barred from undertaking SCW until further reports have been obtained.

The employee should be told of the procedure to follow if at any time before the next assessment they do develop any mental health concerns and the reasons.
Advice to Employer

Conclusions should be expressed in terms of the employee’s fitness for task and will include the conclusions of the occupational health professional but NOT "confidential clinical data."

Record keeping

Records should be kept and appropriate occupational health notes should be completed.

The CBH database should be updated; in the case of barring an individual from SCW this should be updated immediately, by telephone call to CBH if necessary.


CLINICAL STANDARD Q: SUBSTANCE USE / ALCOHOL AND DRUGS MISUSE

What is Substance / Alcohol and Drugs misuse

For the purpose of these Standards, ‘drug misuse’ refers to the use of illegal drugs and the misuse, whether deliberate or unintentional, of prescribed drugs and substances such as solvents. Drug misuse can harm the misuser both physically and mentally and, through the misuser’s actions, other people and the environment. (Drug Misuse At Work a guide for employers HSE)

Some people misuse many sorts of substances; these can be legal (alcohol, tobacco, and solvents), or illegal (cannabis, heroin and cocaine). Some prescribed drugs are addictive (e.g. diazepam). It is well documented that substance misuse and dependence is increasing in the UK, especially among the young.

Drugs and alcohol can affect an employee’s behaviour, how they perform everyday activities and their work. Every one of their actions depends on messages from the brain. Drugs or alcohol can delay and disrupt these messages.

Drug addiction is when an individual becomes dependant on a drug, and it forms a central part of their life. Misusing drugs can lead to physical dependency, or psychological dependency.

Misuse of drugs and alcohol can have very serious consequences for safety and can damage a worker, their colleagues, their work performance and ultimately the company. Their usage is therefore likely to cause a significant safety hazard to those in the Construction Industry. This is particularly so where illicit drugs are used in combination with prescription drugs or alcohol.

Drugs and/ or alcohol can interfere with:-

- co-ordination and the ability of the brain to control eyes, hands and feet
- reaction speed and the ability to judge distance accurately
- short term memory
- the ability to make rational and well-considered decisions

Even if employees do not consider their performance to be a risk to others, they must consider the effect that drugs / alcohol will have on their alertness, concentration and
behaviour and other people’s perception of their behaviour and attitude when this is altered or impaired.

The specific provisions vary between the jurisdictions however legislative provisions and/or individual organisation policy generally address requirements for reporting of drug impairment by workers as well as testing for impairment. Testing may include pre-placement testing, “for cause” or triggered testing, or random testing.

The OHSP should acquaint themselves with the current human rights legislation and the policy and procedures of the organisation for which they provide services.

Illicit drugs are by their nature psychoactive (or psychotropic). This means their detrimental effects in safety terms are not limited to their demonstrated physiological effects on the workers physical skills, but extend to their psychological or behavioural effects. Those under the influence of these drugs have a higher propensity to behave in a manner incompatible with safe working. This may involve but not be limited to, risk taking, aggression, feelings of vulnerability, narrowed attention and poor judgement. Information regarding effects of stimulants on risk of accidents mainly comes from road crash data. Stimulant drugs such as amphetamines and cocaine, which produce a heightened sense of well being, uninhibited behaviour, increased aggression and risk taking behaviours obviously have a potential for causing accidents. These drugs have been used to combat fatigue and while they may initially increase alertness and efficiency, their effect is notoriously unpredictable and may be accompanied by marked changes in mood and behaviour.

The use of illicit (and licit) stimulants to counteract the effects of fatigue carries with it the risk of fatigue rebound. This is observed when the effect of the drug wears off and is associated with profound sleepiness, which can result in a driver suddenly falling asleep, with obvious consequent risk of accident. There is little information about Safety Critical Work such as driving and the short or long-term effects of drugs such as LSD, heroin and designer drugs (for example, Ecstasy, Angel Dust), and no information specifically relevant to construction safety. However, the known clinical effects of these drugs indicate that they have adverse effects on driving skills and judgement. Given their significant affect on mood and behaviour, their use is clearly not compatible with SCW.

The combination of alcohol with illicit drugs is especially dangerous.

Companies should produce a Drugs and Alcohol Policy to run alongside their health and safety policy as a general duty of care under The Health and Safety at Work etc
Act 1974. The OHSP should be aware of the organisation’s policy. A drugs and alcohol policy should cover all employees and contractors involved in SCW and include the requirements for them to be in a fit condition whilst at work.

Employers should consider testing:-

- pre-placement
- prior to promotion or transfer
- random or unannounced
- post incident
- for cause or with cause
- routinely or occasionally
- part of a counselling course or after care programme

The early identification of an alcohol or drug problem and taking appropriate action will minimise the effect of the problem on the service and other employees and may also help reduce any stress experienced by the individual.

It may be very difficult for people to admit they have a problem. There may well be a feeling of shame or fear of reprisals, particularly if they are taking illegal drugs.

**What does testing for drug and alcohol misuse involve?**

Testing for drugs and alcohol is possible, subject to a drug and alcohol policy being established before any programme of drug testing is undertaken.

Alcohol levels can be measured from breath, blood and urine. The presence of most drugs, or their by-products after they have been broken down, can be measured in blood, urine and hair.

Testing for drugs is more complex. There are several techniques for drug testing and none are 100% reliable. Many drugs only stay in the body for a short period of time; it is the chemicals left behind after the drug breaks down that are tested for. This can generally tell you whether a person has taken a certain drug recently. You get the same by-products however from certain over the counter medicines as you do from some illegal drugs, so a positive result does not necessarily mean the person has taken an illegal drug.

More importantly a drug test does not tell you whether the person is under the influence of drugs at that time, or whether their capability is impaired. There is no
simple measure of how different levels of drugs in the blood effect a persons reactions or performance as there is with alcohol.

Drug testing will not tell whether an individual is working under the influence of drugs, it will only indicate whether a person is likely to have taken a certain drug in the recent past, i.e. while on holiday or at a weekend.

Drug testing should be done by a laboratory registered by the UK Registration Service; these will have satisfied assessors that they provide a service that meets all the testing criteria. Testing should be just part of an effective and agreed workplace drug and alcohol policy, which includes an appeal process for if anyone should prove positive. No samples should be taken without the informed consent of the person i.e. a sample cannot be taken under duress.

Testing of a hair sample provides a window of detection for drugs measured in months not days; it can therefore be useful for monitoring abstinence from drugs, or for confirming that a positive drug test resulted from use on a single occasion.

**Purpose of testing for substance misuse**

- To identify any individual, who is undertaking SCW, that may be misusing any substance whereby the consequences of such action could have the potential to affect their own safety or that of other people.

- Following an accident or incident to form part of the investigation.

Workers in the construction industry are SIX times more likely to be killed at work than other workers (Source: HSE Revitalising Health and Safety). A US study showed that companies that tested workers and job applicants for drugs experienced a 51% reduction in injury rates within two years of implementing a drug testing programme. (Source: An Evaluation of Drug Testing in the Workplace: a Study of the Construction Industry. Jonathan Gerber, Cornell University School of Industrial and Labour Relations June 2000.)

Construction workers often work away from home and are therefore vulnerable to peer group pressure which may lead to the inappropriate use of drugs and alcohol.

**Relevant Regulations LINK**

This list is not exhaustive:

- The Health and Safety at Work etc Act 1974
The Management of Health and Safety at Work Regulations 1999 (as amended)  
The Disability Discrimination Act 1995  
The Data Protection Act 1998  
Access to Medical Reports Act 1988  
Misuse of Drugs Act 1971  
Transport and Works Act  
The Road Traffic Act  

**Conducting testing for substance misuse**

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There is no single symptom of an alcohol or drug problem. When completing questionnaires / advising Managers, the presence of any or some of the following may indicate a problem (unless the employee is suffering from an undisclosed illness/disability):

- Excessive sick leave, frequent and unexplained absences and lateness
- Frequent Monday and/or Friday absences
- Excessive lateness especially on Monday
- Leaving work early
- Frequent visits to the cloakroom
- Unexplained absence from post
- Frequent accidents at work resulting in injury and/or damage to equipment
- Accidents away from work
- Difficulty in concentrating
- Taking longer than usual to do tasks
- Having an erratic work pattern
o Difficulty in recalling conversations, instructions or details
o Sticking to routine tasks and avoiding complex ones
o Frequent mistakes
o Improbable excuses for poor work
o Telling lies about performance
o Bad decision making
o Reluctance to accept responsibility
o Anxiety
o Depression
o Irritability
o Lethargy
o Mood swings
o A tendency to blame others
o Over-sensitivity to criticism
o Problems relating to colleagues
o Avoiding company
o Changes in attitude to authority
o Smelling of alcohol at work
o Intoxicated at work (slurred speech, unsteadiness)
o Bloodshot eyes
o Shaky hands
o Poor personal hygiene and unkempt appearance
o Frequent borrowing of money
o Loss of driving licence through drink driving

A strict chain of custody must be maintained to ensure that the results reported relate, beyond all reasonable doubt, to a specific sample provided by a particular individual.
Subject to the type of equipment used and the facilities available. The area should be secure to remove any possibility of falsification of the test; this can include sealing windows, using coloured dye in the toilets flush system.

Please refer to the Fitness for Work Standards in Part 1 of the Occupational Health Standards for the Construction Industry.
CLINICAL STANDARD R: GENERAL HEALTH ASSESSMENT / LIFESTYLE

What is a ‘Healthy Lifestyle’?

Having a ‘healthy lifestyle’ means having a good balance of work and play, a healthy diet and an appropriate amount of physical activity and rest. A healthy lifestyle is about both physical and mental wellbeing.

Health promotion is about encouraging ways to keep healthy and living a healthy lifestyle, preventing illness, and preventing any existing illness from becoming worse.

Health education is about communicating awareness of good practice, relevant risk factors and issues that relate to the individual, including diet, exercise, drug, alcohol and tobacco use, and therefore allowing informed choices.

What is a General Health Assessment?

A general health assessment can take many different approaches, from a basic questionnaire to full medical examination. It should however be aimed at the individual and take a holistic approach.

General Health assessments must be seen as voluntary as there is no statutory requirement for this type of assessment to be undertaken. The OHSP should have processes in place regarding confidentiality and should be aware of their own role and responsibility towards the individual and the duty of care.

Purpose of a General Health Assessment:

It provides an opportunity for the individual to gain a greater understanding of any risks to health from their lifestyle choices, undergo basic health checks which may identify the need for further consultation with their GP and address any lifestyle concerns they may have.

General life style health promotion activities have received a great deal of publicity since the Health of the Nation initiatives. It is here that occupational health providers have the unique opportunity to design health promotion programmes focused to the needs of the business and employees’ individual risks; the needs and topics being identified from the risk assessments, organisational culture and or sickness absence causes and trends. It is paramount that OHSPs understand the difference between this type of health assessment / promotion and statutory health surveillance.
Health promotion initiatives at work should be delivered in such a way to maximise the benefits to employees and be provided according to the age, sex, ill health trends and workplace tasks, and linked with national campaigns, anonymous statistical data collected can be reported back to the employer as a means of ascertaining topics for future health education / promotion campaigns. In any working population, these will undoubtedly include smoking, alcohol, diet and exercise. Medical confidentiality must be maintained at all times.

The OHSP should be fully up to date with the latest, evidenced based recommendations.

**Relevant Regulations**

This list is not exhaustive:

- The Disability Discrimination Act 1995
- The Data Protection Act 1998
- Access to Medical Reports Act 1988

**Conducting a General Health / Lifestyle Assessment / Screening:**

**Equipment / Documentation required:**

Depending on the format of the health assessment and the agreement between the client and the OHSP as to what is to be included, i.e. cholesterol check, determines what is required:

- Relevant questionnaire (Example forms are available to OHSP’s registered with CBH)
- Consent form (Example forms are available to OHSP’s registered with CBH)
- Results of any previous assessments
- Scales
- Height measure
- Tape measure
- Sphygmanometer (see standard J)
- Urinalysis equipment (see standard K)
- Cholesterol testing equipment, including sharps and clinical waste facilities.
- Health promotion / education material / aids
- GP referral letter
Procedure
  - Introduce yourself
  - Confirm identity of employee
  - Complete questionnaire with individual; advising accordingly on lifestyle issues, relevant requirements with regard to self examination where appropriate.
  - Undertake tests as agreed and subject to informed consent of individual. These may include height, weight, BMI, waist hip ratio, blood pressure, cholesterol and urinalysis.

Determining the outcome
Due to the voluntary nature of the health assessment there is no ‘pass or fail’ but the OHSP should be familiar with recommended targets, i.e. for blood pressure, cholesterol etc.

Please refer to Part One of The Industry Standards.

Advice to Employee
The employee should be advised of the outcome and any recommendations the OHSP feels appropriate, including visiting GP for further investigation.

Advice to Employer
The Employer should not be given any individual clinical information, they may however be given anonymised data in the form of statistics.

Record keeping
Records should be kept and appropriate occupational health notes should be completed.

Reports
Reports may be compiled using the anonymised data to give an indication of any trends and to highlight any future health promotion requirements
**APPENDIX 2 LIST OF EXAMPLE FORMS**

The following list includes Example Forms available, via the website, for OHSPs registered with CBH:

- Consent form for report from GP / Specialist
- Consent form for Health Surveillance
- Consent form for inclusion on CBH Database
- Pre placement Health Questionnaire
- Pre-placement Health assessment / medical
- Safety Critical Workers
- Statutory Medicals
- Musculoskeletal Health, Mobility and Co-ordination
- Skin Health Surveillance
- Respiratory Health
- Hearing
- Hand Arm Vibration
- Visual Acuity
- Work-Related Stress / Mental Health Fitness
- General Health Assessment / Lifestyle