OCCUPATIONAL HEALTH

Risk Control Guide

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Introduction

This Risk Management Guideline provides general occupational health information and guidance on some of the common risk exposures in which business are affected. There are a diverse range of exposures within various industries, this is list is not intended to be exhaustive, but is intended to raise awareness in order to guide users in the correct direction.

This Guide is based on United Kingdom regulation and practice. References are from UK sources.

Asbestos

Asbestos can be encountered within the structure, fabric or installations of any building constructed or refurbished prior to the year 2000. Exposure to airborne asbestos fibres may result in serious and incurable long term health conditions.

There are three main types of asbestos (Crocidolite, Amosite and Chrysotile). Although their supply has been prohibited since 1999, asbestos containing materials (ACMs) had a wide range of applications within construction, and are still present within many buildings. The most common uses of asbestos included:

- loose asbestos packing between floors and in partition walls;
- sprayed ('limpet') asbestos on structural beams and girders;
- lagging on pipework and boilers, calorifiers, heat exchangers ;
- asbestos insulating board ceiling tiles, partition walls, service duct covers, fire breaks, heater cupboards, door panels, lift shaft linings, fire surrounds, soffits;
- asbestos cement products such as roof and wall cladding, bath panels, boiler and incinerator flues, fire surrounds, gutters, rainwater pipes, water tanks etc; and
- composites such as floor tiles, mastics, sealants, decorative coatings, rope seals and gaskets (in pipework etc), millboard, paper products, cloth (e.g. fire blankets) and bituminous products (e.g. roofing felt).

Those who have worked within the construction industry or other related activities, and who may have been exposed to airborne fibres from asbestos containing materials are potentially at risk.

Asbestos can cause cancer and other serious lung disease such as asbestosis or scarring of the lungs.

The Control of Asbestos Regulations 2012 requires those with responsibilities to take reasonable steps to identify all ACM's, and ensure the risks are adequately controlled and managed. These duties are imposed on Property Owners, Tenants, Employees and any person who has by virtue a contract or an obligation in relation to the maintenance or repair.

It is the duty holder's responsibility to ensure the risk of exposure to airborne asbestos fibres is adequately managed in accordance with the regulations. If asbestos containing materials need to be encapsulated, sealed or removed works must be undertaken by a licensed contractor. If the materials are low risk (e.g. asbestos cement sheet roofing) then an unlicensed but competent contractor can be employed.

Further information and guidance is available from:

http://www.hse.gov.uk/pubns/books/hsg210.htm - Asbestos Essentials

http://www.hse.gov.uk/pubns/books/l143.htm - Managing and Working with Asbestos

http://www.hse.gov.uk/asbestos/duty.htm - Duty to Manage Asbestos

Display Screen Equipment (DSE)

Employees who use DSE equipment may be exposed to risk of Repetitive Strain Injuries (RSI), more accurately known as Work-Related Upper Limb Disorders (WRULD). This affects the upper limbs and can result in short or long term health issues ranging from conditions such as soreness or fatigue in the arms and hands, which normally response to resting, to chromic soft tissue disorders like carpal tunnel syndrome which may require surgery or cause permanent disability. Other risks arising from the use of DSE include back strain from sitting at an unsuitable or incorrectly adjusted chair, and eye strain.

Employers are required to assess and reduce the risks, provide suitable equipment and workstations, ensure adequate breaks, eye sight tests and provide appropriate information, instruction and training to comply with Display Screen Equipment Regulations.

Further information and guidance is available at:
http://www.hse.gov.uk/msd/dse/

http://www.hse.gov.uk/pubns/ck1.pdf - Display Screen Equipment Checklist

Legionnaires Disease

Legionnaires disease is a potentially fatal form of pneumonia which can affect anybody, but which principally affects those who are susceptible because of age, illness and immunosuppression. Legionella is caused by the bacterium legionella pneumophila and related bacteria. Legionella bacteria can also cause less serious illnesses which are not fatal or permanently debilitating. These forms of bacteria are typically found within natural water sources.

Legionnaires disease is contracted by inhaling small droplets of water suspended in the air, containing bacteria. Certain conditions increase the risk of bacteria growing such as the water temperature, length of time the water is stored, and potential nutrients within the water on which the bacteria may feed.

Equipment such as cooling towers, evaporative condensers, hot and cold water services, showers (including emergency showers), spa baths, fountains, vehicle wash systems and dentist equipment present a potential for risk exposure.

It is the responsibility of the duty holder to ensure risks are suitably managed in accordance with regulations and Health and Safety Executive (HSE) approved guidance.

Further Information and Guidance is available from:

http://www.hse.gov.uk/legionnaires/what-you-must-do.htm - What you must do

http://www.hse.gov.uk/pubns/books/hsg274.htm - Legionnaires Disease Technical Guidance

Manual Handling and Work Related Upper Limb Disorders

Employees exposed to manual handling activities are at risk of Musculoskeletal Disorder (MSD). Most injuries are to the back, though both the upper and lower limbs are also vulnerable.

Manual handing activities is a common exposure throughout all industries and can include lifting, pushing, pulling, bending and twisting. In many instances manual handling injuries occur gradually over a period of time, rather than resulting from one single incident and can be caused or made worse by heavy or repetitive manual labour, poor posture, environment, manual handling technique and existing health conditions.

Harmful effects can lead to damage or disorder of the joints or other tissues leading to both temporary and permanent work incapacity.

Employers are required to assess the risks arising from manual handling activities and control them using the strategy of Eliminate, Minimise, Assess and Reduce exposure in accordance with the Manual Handling Operations Regulations.

Work Related Upper Limb Disorders (WRULD) can be caused by poor working environments, sustained or excessive force and unsuitable working postures. Long term effects may involve loss of functionality, persistent pain and associated work disability.

Further information in relation to Manual Handling and Work Related Upper Limb Disorders, including duties placed on employers can be found at:

http://www.hse.gov.uk/msd/manualhandling.htm - Information and Free Tools

http://www.hse.gov.uk/pubns/indg398.pdf - Making the Best Use of Lifting and Handling Aids

Occupational Asthma

Some airborne substances (vapours, aerosols, liquid spray or mists and dusts) known as respiratory sensitisers, trigger an allergic response, and can cause irritation and permanent damage to the nose, throat and lungs. Symptoms range from a running nose and watery eyes to chronic asthma. Occupational asthma is a cause of ill health which can be made worse by substances inhaled at work. Harmful effects can be minor or severe in some cases resulting in the individual being unable to work and reduced life expectancy.

The majority of occupational sensitisation arises from exposure to:

- isocyanate vapours from spray painting and foam manufacture
- flour, grain or hay dust from milling, baking, farming and dock work
- soldering flux vapours and fumes from welding, soldering or electronic assembly
- some hardwood dusts
- vapours from the curing of epoxy glues and resins
- residues from laboratory and other animals

Employers are required to assess risks in which their employees are exposed to dust, in accordance with The Control of Substances Hazardous to Health (COSHH) Regulations. Long term (8 hour) and short term (15 minute) exposure limits for airborne substances (vapours, aerosols, liquid spray or mists, and dusts) are stipulated within EH40 – Workplace Exposure Limits.

Further information and guidance is available from:

http://www.hse.gov.uk/asthma/ - Asthma

http://www.hse.gov.uk/dust/ - Dust Guidance

Occupational Noise

The effects of noise have been recognised for many years. Individuals exposed to excessive or long term significant levels of noise can experience long term medical conditions such as Tinnitus or permanent noise induced hearing loss.

Occupational noise issues are spread throughout a variety of industries which include, however are not limited to manufacturing, construction and the music and entertainment/leisure industry. Noise can be generated from a variety of sources such as process activities and vibration.

Employers are required to assess risks to employees, visitors, and contractors in accordance with the Control of Noise at Work Regulations 2005, in order to determine what further actions and control measures are required. Preventative or protective measures must be undertaken dependent upon personal noise exposures exceeding the respective 'Action or Limit Values' specified by the regulations.

Employees who are regularly exposed to noise levels above the upper exposure action value must also be subject to appropriate health surveillance.

Further information and guidance is available from:

http://www.hse.gov.uk/pubns/indg362.htm - A Brief Guide to Controlling the Risks

Control of Vibration

Work related health problems caused by can occur when employees are exposed to long term or short term vibration leading to ill health classified under two headings:

- those affecting the hands or arms are known as Hand Arm Vibration Syndrome (HAVS), an example being Vibration White Finger (VWF) and
- those conditions arising from the vibration of the body i.e. Whole Body Vibration Syndrome (WBVS).

Employees working within the mining and quarrying; engineering; forestry; civil engineering, foundry, manufacturing and railway industries are at an increased risk of exposure.

Potentially hazardous equipment can include chainsaws, concrete breakers, strimmer's, hand held grinders, sanders and riveting hammers. Any hand held powered equipment can generate significant levels of vibration.

The effects of hand arm vibration can lead to blanching of the fingertips and for prolonged exposure can ultimately result in death of the tissue and gangrene. Whole body vibration syndrome can include muscular-skeletal health issues, and temporary and permanent loss of mobility.

Employers have a duty to protect people from the risks associated with vibration. This includes assessing employees exposure by carrying out a risk assessment, eliminating or reducing the risk, providing suitable and sufficient information, instruction and training and health surveillance where the risks exists.

Further information and guidance is available from:

http://www.hse.gov.uk/vibration/ - Vibration at Work

Stress

Organisations are working in an increasingly competitive environment that requires them to respond to external challenges and pressures at a time when there may be fewer resources available and greater expectations of them. Rapid information transfer, tight deadlines and expected quick response, coupled with regular organisational change adds to a potentially stressful environment for employees.

Stress is the adverse reaction people have to excessive pressures or other types of demand placed on them. There is a distinction to be made between pressure which leads to a “buzz” and is a motivator and the symptoms which can occur when pressure becomes excessive.

Such symptoms include irritability, tiredness, depression, anxiety, and back pain, as well as difficulties with sleeping, relaxing, concentrating, making decisions or thinking logically. In extreme cases these can result in psychiatric injury and unfitness for work.

Causes of work related stress can include individuals not correctly suited to job roles, inadequate training, monotonous or repetitive work, excessive or slow work speeds, disruptive shift patterns and poor physical working environment. Other causes include poor working or customer relationships, such as bullying, harassment or exposure to physical or verbal aggression.

Organisations need to recognise the risk of stress and implement a suitable and sufficient management system designed to reduce it.

Further information and guidance can be found at:

http://www.hse.gov.uk/pubns/indg430.pdf - How to Tackle Work Related Stress

http://www.hse.gov.uk/stress/furtheradvice/gettingstarted.htm - Stress a 10 Point Checklist Stress

