

## USEFUL H&S TERMS

**ABSORPTION** – This is one of the ways that a substance can gain entry into the body. Absorption can be via the skin, a cut or the tear ducts within the eyes. The injection of a substance through the skin is also a form of absorption via a sharp needle.

**ACCIDENT** - An uncontrolled, unplanned random and unexpected event which could result in loss, harm, damage or injury. Near miss/incidents are accidents which did not result in injury.

**ACM** - Asbestos Containing Material

**ACUTE EFFECT** - This is an effect which becomes apparent immediately after just one exposure to a particular hazard, usually the body has the ability to recover.

**ADJUSTABLE GUARD** - A fixed guard which can be adjusted to give greater and lesser amount of protection but always remains in place. These are found on circular saws which need to be adjusted for different thicknesses of wood.

**ALLERGEN** - An antigen (molecule capable of being recognised by the immune system) that causes an allergic reaction.

**ALVEOLITIS** - This is a form of lung disease caused by organic dusts. It results from an allergic reaction during which the air sacs (alveoli) become swollen. The tissue becomes scarred, the action of the air sacs is interrupted and breathing may be affected.

**APPROVED CODES OF PRACTICE** - These are issued by the Health & Safety Executive, derived from specific Regulations or Acts. They give more details and are easier to understand than the regulations themselves but are not legally binding. I.e. ACOP associated with the Management of Health & Safety at Work Regs 1999. However these may be used in evidence in a court of law.

**AREA SAMPLING** - This is a form of environmental monitoring which involves taking a sample from the general atmosphere of the work area, rather than from the breathing zone of one worker.

**ASTHMA** - A reaction of the lungs to environmental stimulus, it affects the small bronchiole resulting in difficulty in expiration. Inspiration is unaffected. The muscle walls contract leaving the victim struggling for breath. (This is the same as allergic alveolitis).

**ASPHYXIA** – Suffocation from a lack of oxygen. Chemical asphyxia is where a chemical combines with haemoglobin to reduce its capacity to transport oxygen, this can be caused by carbon monoxide.

**AUDIOMETER** – An instrument designed to carry out hearing tests.

**AUTOMATIC GUARD** - A guard which is associated with and dependent upon the mechanism of the machinery and operates to physically remove the danger area from the person. I.e. wall paper guillotine.

**BEL** – A unit of level of a power based on the base ten logarithm scale, normally the 'decibel' is used to measure noise.

**BLACK GLOBE TEMPERATURE** – This monitors the radiant temperature of the ambient air.

**BUBBLER** – A device which air is bubbled through to absorb gases and vapours. This may be done by dissolution or chemical reaction. (Also known as an Impinger).

**CARCINOGENS** - A type of substance that alters living cells causing cancer. e.g. Asbestos

**CARCINOGENIC** - Inherent potential of a substance or physical agent to be a carcinogen.

**CHRONIC EFFECT** – This is an effect which may become apparent after repeated exposure to a hazard. The ill health effects may also take a long time to become apparent. I.e. asbestosis and may be permanent and irreversible.

**CIRCUIT BREAKER** - A mechanical device capable of carrying and breaking current under normal and abnormal conditions. Used to reduce the risk from electric shock by cutting off the supply.

**CIVIL LAW** – the branch of law which enables individuals to take action against each other.

**CODE OF PRACTICE** - A body of rules for Practical Guidance only and not having the force of law although failure to comply may be used in evidence in legal proceedings.

**COMMON LAW** - Concerned with the rights and duties of individuals towards each other. Based on case law and precedents. Normally results in action under the civil legal system.

**CONFINED SPACE** – Any where by virtue of its position has a specified hazard – such as free flowing solid, lack of oxygen, extremes of temperature, flowing liquid etc. i.e. sewer, well or grain silo.

**Class A Fire** - A fire involving solid materials, usually of an organic matter e.g. wood

**Class B Fire** - A fire involving flammable liquids.

**Class C Fire** - A fire involving gases

**Class D Fire** - A fire involving metals

**Class F Fire** – A fire involving cooking fats and oils (Not a BS Standard Class)

**COMBUSTION** - A chemical reaction more commonly known as fire

**COMMUNICATION** - A process by which messages are passed from one person to others, in order to cause a response in the mind and action of the receiver. May be verbal or written, the correct method will depend on the message being communicated and the target audience.

**COMPETENT PERSON** - A person with sufficient knowledge, experience and skills to carry out a task and their duties. This term is used in many new and existing regulations. Other considerations include knowing the limit of ones own expertise.

**CONDUCTION** - This is the method of fire spread by which heat travels from one surface to another causing the fire to spread further. The steel girders of a building once heated can mean the fire and heat spread around the whole building.

**CONVECTION** - One of the four methods of fire spread. Heated air moves upwards where possible. If there is an open lift shaft or other space the warm air will rise causing the fire to spread.

**CORROSIVE** - A substance which will kill or burn living tissue on contact. E.g. Sulphuric Acid

**CRANE** – There are many different types for different circumstances, including tower, derrick (jib), mobile, overhead and gantry.

**CRIMINAL LAW** – The court and legal system which leads to prosecutions for crimes.

**DANGER** - A state or condition in which personal injury and/or asset damage is reasonably foreseeable.

**DANGER ZONE** - Any area around an item of machinery where there is a risk of contact with a dangerous part of a machine - (The Provision and Use of Work Equipment Regulations)

**DANGEROUS OCCURRENCE** - An accident that did not cause injury but had high potential for risk and is reportable under RIDDOR.

**dB (A) DECIBELS** - The scale in decibels given to the hearing range of the human ear. This is a logarithmic calculation to measure the loudness of the sound. (Two identical dB(A) machines will produce a 3 dB(A) increase.)

**DERMATITIS** - This occurs when there has been over exposure to known irritant chemicals. E.G.: Cement dust, solvents and detergents. Symptoms including cracking of the skin, redness, ulceration and infections.

**DISPLAY SCREEN EQUIPMENT** - Any alpha numeric or data display except typewriters, calculators, portables or machinery controls.

**DUST** – Airborne particles of less than 100 microns in size.

**ERGONOMICS** - The study of human interaction with their working environment. Factors include psychological, stress and physical aspects.

**EARTHING** – The metal parts of electrical appliances are bonded or connected to earth, if they become live the earth connection is low resistance and will allow the electricity to flow through it protecting any person at risk. The leakage to earth will cause a trip device or RCD to trip and stop current flowing.

**FIRE PRECAUTIONS** - Measures aimed at preventing or at least minimising the risks to persons and property in the event of a fire.

**FIRE PREVENTION** - Measures behind preventing the outbreak of fire and reducing fire risk: - Examples: No Smoking, cleaning, good housekeeping, safe storage & electrical testing.

**FIRE PROTECTION** - Features within a building to detect, extinguish, contain fire, or allow people to be evacuated safely. Examples: Fire extinguishers, warning signs, emergency lighting, fire doors & fire exits. (also known as Fire Mitigation measures)

**FIRE MITIGATION** – Measures to minimize the spread of fire (e.g. fire doors).

**FIRST AID** – First line treatment with the aim to preserve life and minimise the consequences of an injury.

**FIXED GUARD** – A physical barrier with no moving parts and should prevent access to the danger point of the machine. Must be of substantial construction and should not be easily removable.

**FLASH POINT** - The temperature at which, under certain conditions, a liquid gives off sufficient flammable vapour to produce a flash on application of an ignition source. The minimum temperature at which ignitable vapour will ignite.

**FREQUENCY BAND** – The measurement of sound at different frequencies/ pitches or tones.

**GAS** - Completely elastic fluid which does not become liquid or solid at ordinary temperatures

**GENERAL VENTILATION** – This is the natural ventilation of a workroom, can be via a window or fan.

**GUIDANCE NOTES** - These are printed on H&S issues to provide more technical information, they not legally binding but do set the standards which could be met to meet the current legislation. I.e. The Manual Handling Regulations have an associated guidance note showing good practice which can be followed.

**HARM** - Injury or damage.

**HARMFUL** - A substance which if inhaled, ingested or absorbed into the body may involve limited health problems.

**HAZARD** - A condition that has the potential to cause harm. There are four main categories: Physical, Ergonomic, Chemical & Biological.

**HEALTH SURVEILLANCE** - A provision of certain sets of safety legislation, in particular COSHH, the employer must check on the health of their employees. (Blood tests for lead, lung function tests for respiratory sensitiser)

**HUMAN FACTORS** - These are personal factors which may increase the likelihood of an individual having an accident in the work environment. Perception, motivation, attitudes, personality,

interaction, mental capabilities and physical capabilities are the main human factors.

**INGESTION** - One of the three ways in which a substance gains entry into the body via the mouth and stomach.

**INHALATION** - The way a substance gains entry into the body via the nose and mouth, from here it travels into the lungs and the blood system.

**INHALABLE DUST** – Dust of a particle size which can be inhaled during respiration. The size of particles is normally less than 10 microns.

**INORGANIC DUST** - mineral based dust which can cause forms of pneumoconiosis E.g. coal, silicon and asbestos. Exposure can result in Silicosis, Asbestosis and Coal Workers Lung.

**INSPECTION** - A comprehensive look around the workplace, looking at hazards associated with the workplace, work practices and equipment. The aim is to identify hazards and take remedial action.

**INTERLOCKING GUARD** - This means that if the interlock is not in place the machine cannot operate. Allows access but can be easily overridden. E.g. Food mixer, lift door, microwave door.

**IONISING RADIATION** - Most elements are made up of stable atoms, those containing unstable elements are said to be radioactive. The process of radio active decay produces unstable nuclei which emit three different forms of radiation Alpha, Beta and Gamma. This type of radiation has the ability to ionise matter and change the structure of atoms and cells.

**ISOLATION** - The disconnection and separation of electrical equipment from every source of energy. The isolation method will normally be in the form of a padlock with locks the system off.

**LEGIONNAIRES DSEASE** – This is a form of pneumonia which can be caused by inhaling droplets of contaminated water.

**Leq** – the noise level recorded in the workplace over a certain period. Can be used to calculate people's daily exposure (Lepd).

**LOCAL EXHAUST VENTILATION** - This is a form of hazard control which aims to capture the air borne contaminate before it reaches the work room air or the breathing zone of the worker.

**LOCK-OFF** - A system whereby controls such as switches or valves can be physically and intrinsically locked in the 'OFF' position as part of a SAFE SYSTEM of work.

**LOSS** - Personal injury and/or asset damage.

**MANUAL HANDLING** - Transporting, lifting, pulling or moving by hand or bodily force.

**MEAN DURATION RATE** - 
$$\frac{\text{Total number of days lost}}{\text{Total number of accidents during the period}}$$

**MEANS OF ESCAPE** - The structural means whereby a safe route is maintained for persons from any point of the building to a place of safety.

**NARCOTIC** - Agent that depresses brain functions ea. organic solvents.

**NEAR MISS** – A random, unexpected event which did not result in injury but had the potential to do so.

**NEGLIGENCE** - This occurs when a duty of care is breached, it is failure to exercise reasonable care.

**NEIGHBOUR** - In common law we all owe a duty of care to those who might be directly affected by our acts or omissions. A neighbour is a person who might be closely or directly affected by your actions or lack of them.

**NOISE** - An unwanted sound which has the potential to damage the hearing mechanism.

**NOISE INDUCED HEARING LOSS** – This is where the nerve endings in the ear wear away over time after being exposed the same pitch or tone of sound. Once these nerves are lost the individual loses their perception to sounds of that tone.

**NON IONISING RADIATION** - Low frequency radiation which does not have the ability to ionise matter. However there are still several problems associated with these types of radiation. (E.g. visible light, ultra violet light, infra red and radio waves.)

**ORGANIC DUST** - Animal or vegetable dust particles of under 10 microns which can cause alveolitis. A lung disorder which damages the very small air sacs within the lungs. E.g. Cheese workers lung, Farm workers lung.

**PERCEPTION** - This is the way different individuals see things. Their perception is very much based on their past experiences of life and their knowledge of certain situations. Perception is not always how things really are but how they are seen.

**PERMANENT THRESHOLD SHIFT** - This is a form of noise induced hearing loss which can occur after the hearing mechanism has been exposed to a loud noise. Once permanent it is irreversible.

**PERMIT TO WORK** - A formal written document used when the risk level is high. It must be authorised at the beginning, during and once the work has been completed. This should outline the precautions, the method of work, the people, emergency arrangements and all aspects of the job. (examples: working with live electricity and entry into confined spaces).

**PERSONAL SAMPLING** - This is a form of environmental monitoring which investigates the contaminant in the breathing zone of a particular worker

**PNEUMOCONIOSIS** - This is a generic term for various lung diseases which can be caused by exposure to inorganic dust. Which provokes a tissue reaction and interferes with the function of the lungs. E.G. Asbestosis

**PPE** - Personal Protective Equipment - Anything worn or held by an employee to protect them from a hazard or risk.

**PRACTICABLE** – If a legal requirement is supported by this term then the action must be carried out regardless of the cost, if the action is technically possible it must be completed.

**PRESBYCUSIS** - This is the loss of hearing in the higher frequency band areas. This occurs naturally with old age but can be accelerated by constant exposure to noise.

**RADIATION** - Energy which is emitted or absorbed as particles or in a wave form. There are two types: - ionising and non-ionising.

**REGULATIONS** - These are legally binding and usually tackle one specific aspect of health and safety i.e. noise, electricity, lead etc.

**RESPIRABLE DUST** - Dust of a particle size which is likely to enter the gas exchange area of the lungs. The size of particles is normally less than 7 microns.

**RIDDOR** - Reporting of Injuries Diseases and Dangerous Occurrences Regulations 2013.

**RISK** - Likelihood that a hazard will cause harm under defined conditions. Likelihood X Severity

**RISK ASSESSMENT** - A formal systematic process whereby significant hazards are identified, the risks evaluated, the individuals who may be at risk identified and measures drawn up to reduce the risk of injury.

**SAFEGUARD** - A guard or device designed to protect persons from danger

**SAFE SYSTEM OF WORK** - A procedure which may be written and identifies the safest and best

way of carrying out a process.

**SAFETY CASE** - Formal explanation of methods to be adopted to reduce risk of accident often used in high potential risk situations - e.g. Rail, Petro-chemical, Nuclear Installations.

**SAFETY COMMITTEE** - A committee representative of all staff with the objective of promoting co-operation in investigating, developing and carrying out measures to ensure the health, safety and welfare of the employees.

**SAFETY CULTURE** - This term has no widely agreed definition. It may be described as a product of the individual and group values, attitudes, competencies and patterns of behaviour that determine the commitment to, and the style and proficiency of an organisations health and safety programmes.

**SAFETY MANAGEMENT SYSTEM (SMS)** - Management of Safety in order to promote a strong Safety Culture and achieve high standards of safety performance.

**SAFETY REPRESENTATIVE** - A person appointed by a recognised trade union, who is recognised by the employer under the Safety Representatives and Safety Committees Regulations 1977 and who fulfils the function conferred upon them by the Regulations.

**SEVERITY RATE** - 
$$\frac{\text{Total number of days lost} \times 1000}{\text{Total number of man hours worked}}$$

**SK** - An abbreviated term found on substances which can be absorbed through the skin into the body.

**SLING** - Any item of equipment connected to a hook and between the load. (chains)

**SO FAR AS IS REASONABLE PRACTICABLE** - A legal term quoted initially in the Health & Safety At Work Act, it allows the employer to weigh up the cost of taking action with the risks involved in the workplace or process.

**SOUND** - The result of air being continuously compressed then stretched, the frequency or number of compressions per second determines the pitch, the energy level determines the loudness.

**STATUTE LAW** - An express and formal rule of conduct to be observed by those to whom it is applicable. Usually in the form of Acts of Parliament or Regulations which are all legally enforceable by the courts. EU directives and regulations also form part of UK statute law.

**TEMPORARY THRESHOLD SHIFT** - This is caused by short term exposure to noise, the nerve endings in the cochlea produce temporary deafness. However hearing is only lost to the types and tones of sound which have been encountered. If the noise is removed the person's hearing will recover.

**TINNITUS** - ringing or buzzing in the ears, this can be acute after exposure to high levels of noise or chronic where exposure is repeated over a long period of time.

**TORT** - Civil wrong E.g. Trespass & negligence

**TOXIC** - Inherent potential of a substance to cause harm.

**TOXIN** - Substance that causes harm.

**TRIP DEVICE** - A device which stops a machine if someone approaches the danger area, three main types:- light beams, probes and pressure pads.

**USER** - Under the DSE regulations this is someone who habitually uses a DSE for a significant part of their daily routine.

**VICARIOUS LIABILITY** - The employer is responsible for the torts of the employee if they are committed during the course of their work.

WORK EQUIPMENT - Any tool, appliance or apparatus used for work. This includes items such as hammers, mechanical diggers, drills etc. (PUWER)

WORKPLACE - The workplace may be described as any place where people are at work.

WORKPLACE EXPOSURE LIMITS – This is the airborne concentration of a substance. This level must not be exceeded and exposure reduced AFAIRP for those with R45,46 & 49 classifications i.e. carcinogens and R61 which may harm the unborn child.