NZ Occupational Hygiene Society (NZOHS) Core Competencies

Competency name	Definition
Absenteeism	The practice of regularly staying away from work. Also includes presenteeism, the practice of coming to work despite illness, injury, anxiety, etc., often resulting in reduced productivity.
Abuse or Harassment	Abuse includes physical assault, sexual violence, emotional abuse and controlling behaviour. It is often a pattern of ongoing behaviour but may also refer to a one-off incident. Abuse can result in physical and mental health consequences for victims, perpetrators and children who are witnesses. Harassment is a pattern of behaviour that is directed against another person, including specified acts (for example as defined in the Harassment Act 1997) that causes the other person to fear for their safety (or that would cause a reasonable person in the circumstances to fear for their safety). In common use this can also extend to fear for the person's health.
Air Quality	This refers to the air quality (that is, the amount of chemicals and particles into the air we breathe) within and around buildings and structures, especially as it relates to the health and comfort of building occupants.
Airborne Contaminants	These are airborne contaminants that come in solid, semi-liquid mineral, liquid, chemical or organic material that can remain suspended in the air due to its small size. The individual terms refer to the way the contaminant is generated. Vapours are forms of substances that are normally in the solid or liquid state at room temperature (e.g. degreasing solvents). Fumes are formed when material from a volatised solid condenses in cool air (e.g. welding or diesel fumes). Smoke is an aerosol of solid or liquid particles resulting from incomplete combustion of carbonaceous materials (e.g. a fire). Aerosols are pollutants in liquid droplet form which are suspended and if very small are called mists or fog.
Asbestos	A group of naturally occurring, fibrous minerals, hazardous to health. The term asbestos includes actinolite, amosite, chrysolite, crocidolite, fibrous anthophyllite or tremolite, or any mixture containing these minerals.
Asbestos Management	Specialist advice and services in relation to the management, identification and measurement of asbestos. This may include personal exposure monitoring, bulk sampling or clearance sampling.
Biological Hazards - Bacteria, Viruses & Moulds	Hazards that carry the risk of humans (or animals) contracting harmful bacteria, viruses and moulds. A fundemental difference between chemical and biological hazards is that biological agents, whether bacteria, viruses or moulds have the ability in the right conditions to rapidly replicate themselves. This means that the focus on control is not only avoidance of contact with the agent but also on ensuring that conditions favourable for growth of the organism are prevented. Bacteria: single celled organisms that live in soil, water and air. There are many thousands of different types of bacteria - many are harmless, or even beneficial, but some bacteria cause disease, e.g. Legionnaires disease, types of food poisoning (e.g. salmonella) and anthrax. Viruses: tiny parasitic organisms that can only reproduce within living cells. Viruses cause many diseases including the common cold, influenza, measles, rabies, hepatitis and AIDS. Moulds - simple plants lacking chlorophyll and normal plant structures (e.g. leaves, stems etc).
Biological Monitoring - Non-invasive	Collection of non-invasive biological specimens (such as, hair, breath, saliva, nails, skin surface etc) and interpretation of all biological specimen results for identification and evaluation of health risks
Cancer	Cancer is a group of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body. Occupational exposure to chemicals, dusts, radiation, and certain industrial processes have been tied to occupational cancer. Exposure to cancer-causing chemicals, also called carcinogens, may cause mutations that allow cells to grow out of control, causing cancer.
Compliance with Legislation	Working with organisations to ensure that they are aware of and take steps to comply with relevant health and safety laws and regulations.
Data Reporting and Analysis	Collecting data and/or analysing and interpreting actual health and safety performance compared with specific objectives, targets or standards.
Design of Plant and Structures	The design or redesign of plant or structures that are used (or could reasonably be expected to be used) in workplaces. 'Designers' includes all PCBUS contributing to the design process. Design must consider the lifecycle of the artefact and the health and safety of all those who interact with it at each stage including during construction, use and disposal.May include specific design for acccessibility.
Design Verification	Evaluation of whether a product, service, or system meets requirements and specifications (including compliance with regulations, requirements, specifications, or imposed conditions) and that it fulfils its intended purpose. In some circumstances design verification maybe restricted to certain persons by law or regulation e.g. cranes or pressure vessel design verification. May include specific design for disability.
Dust and Fibre Control	Advice and services about the management and measurement of the release of dust and/or fibres from work processes. This can include advice on control measures or cunducting personal and/or personal and/or area sampling.

Dust and Fibres (not Asbestos)	Dusts are small solid particles, conventionally taken as those particles below 75 µm in diameter, which settle out under their own weight but which may remain suspended for some time. They may be work-generated or natural occurring. They include organic (e.g. flour), metallic (e.g. lead) and chemical dusts. Fibres (non-asbestos) include synthetic fibrous materials such as rockwool (or stonewool) and glass wool, as well as ceramic, aramid, nylon, carbon and silicon carbide fibres.
Expert Witness	Providing a skilled commentary on factual matters to allow decision-makers to better assess the probability that one or other of the various available inferences or conclusions is correct.
Explosive Atmospheres or Combustible Dust	A mixture of hazardous substances with air, under atmospheric conditions (ambient temperatures and pressures), in the form of gases, vapours, mist or dust in which, after ignition has occurred, combustion spreads to the entire unburned mixture. If there is enough of the hazardous substance (e.g. paint vapour, methane, wood dust etc.) mixed in with air then all it needs is a source of ignition to cause an explosion.
Exposure Monitoring	The measurement and evaluation of exposure to a health hazard experienced by a person. It includes monitoring of the conditions at the workplace to find out if workers are potentially being exposed to a hazard at harmful levels, or if the measures in place to control exposure to that hazard are working. Exposure monitoring must be carried out so far as is reasonably practicable for the purpose of preventing harm. Monitoring should be carried out by, or under the supervision of, a competent person e.g. an occupational hygienist.
Facilitation of Health and Safety by Design Processes	Facilitating or coordinating health and safety by design processes for plant, substances and structures. This will usually involve coordinating the work of diverse technical specialists (potentially from multiple PCBUs) and facilitating the design process. It doesn't include design modification for people with disabilities.
Fatality	Prevention or management of a fatality at work. A fatality is the permanent death of a person (i.e. it does not include instances where a person is revived). Fatalities can result from senescence ('old age'), injury, or illness or chronic issues. In cases where attribution is unclear a Coronial decision stands as the official cause of death, including drawing conclusions about whether a fatality was work-related.
Hand-Arm and Whole body Vibration Syndrome	The provision of specialist advice regarding hand-arm and whole-body vibration, and/or the measurement of this vibration for human health and/or comfort. Measurements for hand-arm vibration (HAV) and/or whole-body vibration (WBV) are used to assess exposure levels against appropriate action values and exposure limits, in order to evaluate risk.
Handheld Tools / Power Tools	A hand tool is any tool that is powered by hand (e.g. wrenches, pliers, cutters, striking tools, struck or hammered tools, screwdrivers, vises, clamps, snips, saws, drills and knives) A power tool is a tool that is actuated by an additional power source and mechanism other than solely manual labour. Commonly power tools use electric motors, internal combustion engines, steam engines, direct burning of fuel and/or propellants, or natural power sources like wind or moving water. PCBUs need to manage risks related to noise, machinery safety and vibration that arise from the use of handheld or power tools.
Hazard or Risk Assessment	Hazard identification, risk assessment and management: A systematic process to identify hazards and assess/quantify the likelihood, consequence/severity of harm and put in place appropriate controls.
Hazardous Substances, Dangerous Goods or Chemicals - Awareness	Preliminary advice about thresholds for handling, storing or transporting chemicals or hazardous substances (substances that are explosive, flammable, oxidising, toxic, corrosive or toxic to the environment (ecotoxic)).
Hazardous Substances, Dangerous Goods or Chemicals - General Advice	Advice about handling, storing or transporting chemicals or hazardous substances (substances that are explosive, flammable, oxidising, toxic, corrosive or toxic to the environment (ecotoxic)).
Hazardous Substances, Dangerous Goods or Chemicals - Management	The management of hazardous substances (substances that are explosive, flammable, oxidising, toxic, corrosive or toxic to the environment (ecotoxic))
Hazardous Substances, Dangerous Goods or Chemicals Advice - Infectious Substances Advice	Advice about handling and/or storing infectious substances (human or animal).
Hazardous Substances, Dangerous Goods or Chemicals Advice - New Organisms Advice	Advice about handling and/or storing materials which are or may contain new organisms or genetically modified organisms.
Hazardous Substances, Dangerous Goods or Chemicals Advice - Radioactive Substances Advice	Advice about handling and/or storing radioactive substances.
Health and Safety Advice	An opinion or recommendation about managing a business' health and/or safety risks.
Health and Safety Assessment	A health and safety assessment evaluates risk generated in the workplace or in the work process with objectives to remove, reduce and replace the source of risk with safer equipment or processes, or to lessen the risk to the health and safety of the workers This may include assessment at an organisational, business unit or site specific level.
Health and Safety Assurance	Evaluating health and safety management system effectiveness to provide confidence to management on whether the system is fit-for-purpose.
Health and Safety Management Systems	Facilitating the development of a health and safety management system which includes organisational structure, planning activities, responsibilities, policy, procedures, processes and resources, for developing, implementing, reviewing and maintaining positive workplace health and safety practices.
Health and Safety Policies	Guide management in the development of a statement of intent which details their commitment to achieving the company’s health and safety objectives.

Health and Safety System Performance	Measuring the effectiveness of the workplace health and safety management system.
Hearing Loss	A partial or total inability to hear. Hearing loss can be temporary or permanent. Hearing loss is diagnosed when hearing testing finds that a person is unable to hear 25 decibels in at least one ear. Hearing loss can be categorised as mild, moderate, severe, or profound. Hearing loss may be caused by a number of factors, including: genetics, ageing, exposure to noise, some infections, birth complications, trauma to the ear, and certain medications or toxins. A common condition that results in hearing loss is chronic ear infections.
Hydration	Hydration refers to the amount of water in the body. As humans are approximately 60% water and rely on being well-hydrated for optimal performance, being under-hydrated can negatively affect both work performance and health.
Individual Computer Workstation Set-up and Advice	Assessing and providing education/guidance on workstation equipment and its adjustment, and on work methods including break practices and exercise to maintain health, comfort and performance at work a.k.a 'workstation audits or assessments'.
Manual Handling	Manual handling is any activity requiring a person to interact with their environment and use any part of their muscles or skeletal system to lift, lower, push, pull, carry, throw, move, restrain or hold any animate or inanimate object.
Mentoring	Providing a learning partnership between an experienced professional person (mentor) and a less experienced person (mentee) for the purpose of sharing knowledge and information.
Mining, Quarrying and Tunnelling	Collectively work in these sectors is usually referred to as the 'Extractives industry' and refers to the removal of metals, mineral and aggregates from the earth. New Zealand legislation places requirements on the extractives industry with regard to health and safety, specific to the type of operation. This includes the Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016.
Noise	Noise is sound that is not wanted by the perceiver, because it is unpleasant, loud, or interferes with hearing. This results in the subjective discretion between sound and noise, where any sound may be considered noise depending on the perceiver.
Noise Assessments	Conducting sound surveys to establish the noise environment's potential for producing noise induced hearing loss, and to identify controls.
Pesticides and Herbicides	Chemical poisons used to kill pests. Includes herbicides, insecticides and fungicides.
Radiation	Radiation is energy which is transmitted, emitted or absorbed in the form of particles or waves. There are two main sections of the electromagnetic field, which are split into ionising and non-ionising radiation. The ionising radiation group includes gamma and x-rays as well as alpha, beta, proton and neutrons. Non-ionising radiation includes microwaves, lasers and radio waves.
Respiratory Illness / Asthma (Review Name)	Disease of the airways and lungs. Respiratory diseases range from mild and self-limiting, such as a cough or the common cold, to life-threatening entities like bacterial pneumonia, pulmonary embolism, acute asthma and lung cancer.
Risk Management Systems	Providing advice about systems that enable the setting of priorities based on risk assessment, establishing efficient and consistent risk reduction policies, evaluating the range of risk reduction alternatives, identifying cost-effective risk reduction measures, and identifying risk mitigation and contingency measures.
Skin Disorders	A skin disease caused by a physical, chemical or biological hazard in the workplace. Contact dermatitis is the most common example.
Slips, Trips and Falls	Slips are loss of traction events (usually with the feet); trips are when a step is disrupted by contact with an object. Both slips and trips may result in a fall, though falls may also occur for other reasons. Falls are when a loss of balance or other event occurs, causing the body to fall due to gravity onto a lower surface.
Substances Hazardous to Health	A substance, or product containing a substance, that is known or suspected to cause harm to health. this includes a substance classified as having toxic or corrosive properties under the Hazardous Substances and New Organisms Act 1996, a substance for which a prescribed exposure standard exists (e.g. a workplace exposure standard) and a substance specified in a safe work instrument as requiring health monitoring.
Temperature Extremes	Excessive exposure to heat is referred to as heat stress and excessive exposure to cold is referred to as cold stress. In a very hot environment, the most serious concern is heat stroke. Heat exhaustion, and fainting (syncope) are less serious types illnesses which are not fatal but interfere with a person's ability to work. At very cold temperatures, the most serious concern is the risk of hypothermia or dangerous overcooling of the body. Another serious effect of cold exposure is frostbite or freezing of the exposed extremities such as fingers, toes, nose and ear lobes.
Thermal Environment Advice	General Advice about thermal environment which includes air temperature. This can be applied to indoor work environments as well as outdoor environments.
Toxicology	Toxicology is the study of adverse effects of agents on living organisms. It is primary concerned with assessing toxicological risk involved with working with chemicals. It can be used for assessing whether a new product is less hazardous than the original, for creating in house exposure levels where no regulatory level exists.
Training / Education	Providing education, training or facilitation in health and safety-related topics.
Traumatic Injury	Physical harm arising from a single accident or event and defined by the degree of physical incapacity.
Ultraviolet Light	Ultraviolet light is a type of electromagnetic radiation which can be used in chemical processing, or it can be damaging to materials and living tissues. The most common form of UV light is from sunlight but it can also be used in artificial sources such as: for disinfecting surfaces, tanning booths, black lights, curing lamps, germicidal lamps, mercury vapour lamps, halogen lights, high-intensity discharge lamps, fluorescent and incandescent sources, plus some types of lasers.

Weather Conditions / Events	Weather conditions/events are the atmospheric conditions that comprise the state of the atmosphere in terms of temperature, wind, clouds, and precipitation. Adverse weather conditions/events can effect a person's ability to work safely by introducing hazards such as slips, darkness, wind etc. The management of these hazards is an integral part of risk assessment, particularly with work that is outside.
Wellbeing and Work-life Balance	Wellbeing, welfare or wellness is ageneral term for the condition of an individual or group, for example their social, economic, psychological, spiritual or medical state. A high level of wellbeing means in some sense the individual or group's condition is positive, while low wellbeing is associated with negative happenings. Work-life balance is a concept including proper prioritizing between "work" (career and ambition) and "lifestyle" (health, pleasure, leisure, family and spiritual development/meditation).
Wellness	Wellness is the optimal state of health of individuals and groups. There are two focal concerns: the realisation of the fullest potential of an individual physically, psychologically, socially, spiritually and economically, and the fulfilment of one’s role expectations in the family, community, place of worship, workplace and other settings.
Worker Engagement, Participation and Representation	Working with organisations to help them involve their workers in workplace health and safety.
Working in Confined Spaces	A confined space is defined as an enclosed or partially enclosed space that is not intended or designed primarily for human occupancy. It is liable to have an atmosphere that contains harmful contaminants or not contain a safe oxygen level. It may have contents that could cause engulfment. It may have restricted means for entry and exit. Examples include: storage tanks, tank cars, process vessels, boilers, silos, pits, pipes, sewers, shafts, ducts and shipboard spaces.
Workplace Assessments - General	A scoping assessment to identify when to bring in a specialist.
Workplace Assessments - Specialist - Hand-Arm Vibration and Whole-Body Vibration	The provision of specialist advice regarding hand-arm and whole-body vibration, and/or the measurement of this vibration for human health and/or comfort. Measurements for hand-arm vibration (HAV) and/or whole-body vibration (WBV) are used to assess exposure levels against appropriate action values and exposure limits, in order to evaluate risk.
Workplace Assessments - Specialist - Indoor Air Quality	Advice and/or measurement of the pollutant levels, air temperature, and humidity, air velocity, odours etc either individually or in combination that affect a person's health and wellbeing.
Workplace Assessments - Specialist - Lighting	The provision of specialist advice regarding lighting, and/or the measurement of lighting to ascertain the quantity and quality of light to fulfil three functions: ensure the safety of people, facilitate the performance of the visual tasks and aid the creation of the appropriate visual environment. A full light survey can identify defects in the lighting system and the potential for short or long term health problems.
Workplace Assessments - Specialist - Radiation	Advice and/or the measurement of radiation exposure. For ionising radiation this can include gamma, x-rays, alpha, beta, proton and neutrons or for non-ionising radiation microwaves, lasers and radiowaves etc.
Workplace Assessments - Specialist - Temperature / Thermal Environment	The provision of specialist advice regarding work environment temperature, and/or the measurement of the impact of working in hot and cold environments where exposure to extreme heat or cold can result in illness, injury and, in extreme cases, death. This can include measurements for heat stress/strain or cold stressors.
Workplace Assessments - Specialist - Ventilation	Specialist advice and/or measurement of the effectiveness of industrial ventilation systems to control contaminants in the workplace by either dilution or local exhaust ventilation. This can include measurement of the contaminants through personal or area sampling, microbiological monitoring for bacteria or viruses, or the assessment of the thermal environment for health and wellness.