

GLOSSARY

OF OCCUPATIONAL

HEALTH & SAFETY TERMS

About the Glossary

This glossary is designed for joint health and safety committee members, health and safety representatives, and others with workplace health and safety responsibilities. It provides easy to understand definitions of common workplace health and safety terms. The glossary does not attempt to provide strict legal or technical definitions.

For definitions of more specialized health and safety terms, see **For More Information**, at the end of this publication, or feel free to contact us at:

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Absorption – The entry of a substance into the body through broken or unbroken skin.

Accident – An unplanned event that results in harm to people, damage to property or loss to process.

Accident Causation – The many factors that act together to cause accidents. They include: personal factors, job factors, and lack of management control factors.

Personal factors:

- ▶ inadequate capability
- ▶ lack of knowledge/skill
- ▶ improper motivation
- ▶ stress

Job factors:

- ▶ inadequate leadership or supervision
- ▶ inadequate engineering
- ▶ inadequate purchasing
- ▶ inadequate maintenance
- ▶ inadequate work standards/procedures
- ▶ inadequate hazard controls

Lack of management control factors:

- ▶ inadequate program
- ▶ inadequate program standards
- ▶ inadequate compliance with standards
- ▶ inadequate hazard controls

Accident Investigation – The process of systematically gathering and analyzing information about an accident. This is done for the purposes of identifying causes and making recommendations to prevent the accident from happening again.

Accident Prevention – The systematic application of recognized principles to reduce incidents, accidents, or the accident potential of a system or organization.

Acute Effect – A change that occurs in the body within a relatively short time (minutes, hours, days) following exposure to a substance.

Acute Exposure – A single exposure to a hazardous agent.

Additive Effects – The health effects of a mixture which are equal to the sum of the effects of the components of the mixture.

Administrative Controls – A category of hazard control that uses administrative/management involvement in order to minimize employee exposure to the hazard. Some examples are:

- ▶ job enrichment
- ▶ job rotation
- ▶ work/rest schedules
- ▶ work rates
- ▶ periods of adjustment

Agenda – A plan or list of items to be considered at a meeting. It is usually circulated to members in advance of the meeting so that they are aware of what will be discussed.

Agent – Any substance, force, organism or influence that affects the body, a part of the body, or any of its functions. The effects may be beneficial or harmful.

American Conference of Governmental Industrial Hygienists (ACGIH) – An organization of industrial hygiene professionals that develops occupational health and safety programs. ACGIH develops and publishes recommended occupational exposure limits for hundreds of chemical substances and physical agents (see *Threshold Limit Value*).

Area Sampling – Collection and analysis of representative samples of air in general work areas in order to determine the concentrations of any contaminants that are present.

Asphyxiant – A vapour or gas that can either reduce the oxygen content in the air or interfere with the body's ability to use oxygen. Exposure to an asphyxiant can result in unconsciousness or death due to being unable to breathe.

Audiometric Testing – Tests that are conducted to determine the hearing ability of a person. These tests may be used to establish an employee's baseline hearing, to identify any subsequent hearing loss, and to monitor the effectiveness of noise controls.

Barrier Cream – A cream designed to protect the hands and other parts of the skin from exposure to harmful agents. Barrier cream is also known as protective hand cream.

Bilateral Work Stoppage – Stoppage of work under the direction of the worker certified member and the management certified member when both members have reason to believe that dangerous circumstances exist.

Biological Agent – Any living organism (for example, virus or bacteria) that affects the body, a part of the body, or any of its functions. The effects may be beneficial or harmful.

Biological Monitoring – The use of medical tests (for example, blood, urine, exhaled air) to determine whether a person has been or is being exposed to a substance.

Boiling Point – The temperature at which a liquid changes to a vapour.

Bonding – The use of low-resistance material to connect two or more conductive objects that would likely undergo a build-up of static electricity. Bonding prevents the unwanted release of electrical energy, such as sparks. E.g., transferring of one flammable liquid from one container to another can release electrical energy if it is not bonded.

Breathing Zone – The area surrounding the worker's head. The make-up of air in this area is thought to be representative of the air that is actually breathed in by the worker.

By-Product – The product formed or released by a material during use in a process. This is produced in addition to the principle product. A by-product may be toxic, flammable or explosive.

Cancer – A disease characterized by an abnormal growth of cells.

Carcinogen – A chemical, physical or biological agent that can cause cancer in humans or animals.

Certified Member – A worker or management member of a joint health and safety committee who has successfully completed a special health and safety training program developed under an outside agency, that has been approved by the Workplace Safety and Insurance Board of Ontario.

Chemical Agent – A chemical substance that affects the body, a part of the body, or any of its functions. The effects may be beneficial or harmful.

Chronic Effect – A change that occurs in the body over a relatively long time (weeks, months, years) following repeated exposure or a single over-exposure to a substance.

Chronic Exposure – Repeated exposure to a hazardous agent.

Combustible – Capable of catching fire and burning, usually a material that has a flash point above 37.8°C. See also *flammable*.

Compensable Injury – An injury for which the Workplace Safety and Insurance Board (in Ontario) or a workplace compensation board of a jurisdiction will provide compensation because it arose out of and in the course of work.

Compensation Claim – A claim filed with the Workplace Safety and Insurance Board (in Ontario) or a workplace compensation board of a jurisdiction by or on behalf of an employee who has suffered a disabling injury or illness, or death, arising out of and in the course of work.

Competent Person – The Occupational Health and Safety Act of Ontario defines a competent person as a person who:

- ▶ is qualified because of his or her knowledge, training and experience to organize the work and its performance;
- ▶ is familiar with the provisions of this Act and the regulations that apply to the work; and
- ▶ has knowledge of any potential or actual danger to health or safety in the workplace.

Confined Space – A space in which a hazardous gas, vapour, dust or fume may collect or in which oxygen may be used up because of the construction of the space, its location, contents, or the work activity carried out in it. It is an area which is not designed for continuous human occupancy and has limited opening for entry, exits or ventilation.

Contaminant – An unwanted material (for example, radioactive, biological or chemical) that is likely to harm the quality of the working environment. The most common workplace contaminants are chemicals that may be present in the form of dusts, fumes, gases or vapours.

Controlled Product – Any product or ingredient that meets the criteria for one or more of the classes of hazards established by the Workplace Hazardous Materials Information System (WHMIS). The classes are:

- ▶ compressed gas
- ▶ flammable and combustible materials
- ▶ oxidizing materials
- ▶ poisonous and infectious materials
- ▶ corrosive materials
- ▶ dangerously reactive materials

Use of these materials in the workplace is regulated under provincial workplace health and safety laws.

Controls – Measures designed to eliminate or reduce hazards or hazardous exposures. Examples include: engineering controls, administrative controls, personal protective equipment. Hazards can be controlled at the source, along the path to the worker, or at the worker.

Corrosive – A substance that will burn the skin or eyes on contact.

Critical Injury – The *Occupational Health and Safety Act of Ontario* defines critical injury as serious injury that:

- ▶ is life-threatening
- ▶ produces unconsciousness
- ▶ results in a substantial loss of blood
- ▶ involves the fracture of a leg or arm (but not a finger or toe)
- ▶ involves the amputation of a leg, arm, hand or foot (but not a finger or toe)
- ▶ consists of burns to a major portion of the body
- ▶ causes the loss of sight in an eye

Critical Parts or Items – The parts of machinery, equipment, materials, structures or other areas that are more likely than other components to result in a major problem or loss when worn, damaged, abused, misused, or improperly applied.

Cumulative Trauma Disorder – See *repetitive strain injury*.

Danger Zone – An area or location where the probability of injury is high (for example, in the vicinity of saw blades).

Decomposition – The breakdown of a material or substance (by heat, chemical reaction, rotting or other process) into parts or elements.

Dermal – Relating to the skin.

Dermatitis – Inflammation of the skin. Symptoms of dermatitis may include: redness, blisters, and cracks in the skin.

Designated Substance – A biological, chemical, or physical agent specified as a designated substance by a regulation made under the Occupational Health and Safety Act of Ontario. Designated substances are substances that are known to be particularly hazardous. The use of a designated substance in the workplace may either be not allowed or strictly controlled by law.

Dilution Ventilation – See *ventilation*.

Disabling Injury – An injury that prevents a person from coming to work or doing his or her usual job duties.

Due Diligence – The taking of every precaution reasonable in the circumstances for the protection of the health and safety of workers.

Dust – Fine particles of a solid that can remain suspended in air. The particle size of a dust is larger than that of a fume. Dusts are produced by mechanical action, such as grinding. Some dusts may be harmful to an employee's health. See *respirable particles*.

Embryotoxin – An agent that is harmful or poisonous to unborn children up to the end of the eighth week of development. See also *teratogen*.

Emergency Plan – Detailed procedures for responding to an emergency, such as a fire or explosion, a chemical spill, or an uncontrolled release of energy. An emergency plan is necessary to keep order, and minimize the effects of the disaster.

Engineering Controls – A category of hazard control that uses physical/engineering methods to eliminate or minimize the hazard. Examples of engineering controls include: ventilation, isolation, elimination, enclosure, substitution and design of the workplace or equipment.

Environment – The surrounding conditions, influences, and forces to which an employee is exposed in the workplace.

Epidemiology – The science that deals with the study of disease in a general population. The rate of occurrence and distribution of a particular disease (by age, gender or occupation) may provide information about the causes of disease.

Ergonomics – An applied science that studies the interaction between people and the work environment. It focuses on matching the job to the worker.

Evaporation – The process by which a liquid, without reaching its boiling point, changes into a vapour and mixes with the air.

Explosive – A substance, mixture or compound that is capable of producing an explosion.

Exposure Records – The records kept by an employer, or company doctor or nurse of an employee's exposure to a hazardous material or physical agent in the workplace. These records show the time, level and length of exposure for each substance or agent involved.

Exposure Values – The airborne concentrations of a biological, chemical, or physical agent to which it is believed nearly all workers may be exposed without experiencing any harmful effects.

1. **Time Weighted Average Exposure Value (TWAEV)** – The time weighted average concentration or levels of a chemical or biological agent for an 8-hour day or a 40-hour week to which it is believed nearly all workers may be exposed, day after day, without experiencing harmful effects.
2. **Short-Term Exposure Value (STEV)** – The maximum airborne concentration of a chemical, biological or physical agent to which workers may be exposed from time to time, provided that the exposure is for not more than 15 minutes, is not more often than four times in a work day, and at least 60 minutes have elapsed from the time of the last exposure.
3. **Ceiling Exposure Value (CEV)** – The maximum exposure to an airborne concentration of a chemical, biological or physical agent that is not to be exceeded for any length of time.

Note: Recommended exposure values established by ACGIH are known as Threshold Exposure Values. See *Threshold Limit Values*.

Fatality – Death resulting from an accident.

First Aid – The immediate care given to a person who is injured or who suddenly becomes ill. It can range from disinfecting a cut and applying a bandage to helping someone who is choking or having a heart attack.

Flammable – Capable of easily catching fire and of burning, usually a material that has a flash point below 37.8°C. See also *combustible*.

Flash Point – The lowest temperature at which a liquid will give off enough vapours to form a mixture that will burn if ignited. The lower the flash point, the higher the risk of fire.

Fog – Suspended droplets of a liquid that are produced by condensation or by the breaking up of a liquid (for example, by splashing or foaming).

Frequency – See *injury frequency rate*.

Fugitive Emission – A gas, liquid, solid, vapour, fume, mist, fog or dust that escapes from process equipment, emission control equipment or a product.

Fume – Finely divided solid particles that are formed when a hot metal vapour cools and condenses. Fumes are usually associated with molten metals (for example, copper, lead or zinc and are often accompanied by a chemical reaction such as oxidation. See *oxidizing agent*.

Gas – A formless substance that expands to occupy the space of its container (for example, methane, acetylene).

General Exhaust – See *ventilation*.

General Ventilation – See *ventilation*.

Glare – Bright light that interferes with a person's ability to see. Glare causes discomfort and can lead to eyestrain and headaches.

Grounding – Electrical connection of one or more conductive objects to the earth through the use of metal grounding rods or other devices.

Guarding – Use of any device or combination of devices designed to keep any part of a worker's body out of the danger zone of a machine during its operating cycle. This usually involves guarding the point of operation, guarding power transmission components by fixed enclosures, and/or protecting the operator and nearby workers from flying fragments.

Hazard – The potential of any machine, equipment, process, material (including biological and chemical) or physical factor that may cause harm to people, or damage to property or the environment.

Hazardous Material – Any substance that may produce adverse health and/or safety effects to people or the environment.

Health – The World Health Organization has defined health as more than just the absence of disease. Rather, it is a state of complete physical, mental and social well-being.

Health and Safety Policy – A policy is a statement of intent, and a commitment to plan for coordinated management action. A policy should provide a clear indication of a company's health and safety objectives. This, in turn, will provide direction for the health and safety program. See also *health and safety program*.

Health and Safety Program – A systematic combination of activities, procedures, and facilities designed to ensure and maintain a safe and healthy workplace.

Health and Safety Representative – A representative selected under provisions of the Occupational Health and Safety Act of Ontario. A representative is usually required in a workplace with more than five but fewer than 20 employees. In such a workplace, workers must select one employee as a representative. Generally speaking, a health and safety representative has the same responsibilities and powers as a joint health and safety committee. See *joint health and safety committee*.

Health Care – Under the *Workplace Safety and Insurance Act of Ontario*, health care means:

- ▶ the aid of doctors and dentists
- ▶ the aid of professionals who practice without drugs
- ▶ hospital and nursing services
- ▶ artificial body parts and devices which may be necessary as a result of any work-related injury and
- ▶ the replacement or repair of such parts and devices when found necessary by the Board

Heat Exhaustion – Overheating of the body. Heat exhaustion can happen when the body loses too much fluid (because of excessive sweating) or when conditions, such as physical activity in a hot environment, prevent sweat from evaporating into the air.

Heat Stroke – A potentially deadly condition in which over-exposure to a very hot environment breaks down the body's ability to control its temperature and cool itself sufficiently. The body temperature rises to a very high (deadly) level.

Housekeeping – A way of controlling hazards along the path between the source and the worker. Good housekeeping means having no unnecessary items in the workplace and keeping all necessary items in their proper places. It includes proper cleaning, control of dust, disposal of wastes, clean-up of spills and maintaining clear aisles, exits, and work areas.

Human Error – This term is used today to include not just workers' errors, but engineering deficiencies and lack of adequate organizational controls which together account for the majority of accidents.

Hygiene Practices – A broad term for personal health habits that may reduce or prevent the exposure of a worker to chemical or biological substances. Hygiene practices include:

- ▶ not smoking, eating or drinking in the work area
- ▶ washing up before breaks and meals
- ▶ removing contaminated clothing before leaving work
- ▶ keeping street clothes separate from contaminated work clothing.

Hypersensitive – The condition of being reactive to substances that normally would not affect most people.

Hypothermia – A condition in which body temperature drops below normal (36°C or 96.8°F). It most frequently develops from being exposed to very low temperatures. Hypothermia can cause death.

Ignition Source – A source of energy, such as heat, flame, sparks or static electricity, that is capable of causing a fuel mixture to burn.

Incident – An unwanted event which, in different circumstances, could have resulted in harm to people, damage to property or loss to a process. Also known as a *near miss*.

Incident Investigation – The process of systematically gathering and analyzing information about an incident. This is done for the purposes of identifying causes and making recommendations to prevent the incident from happening again.

Incompatible – A term used to describe materials that could cause dangerous reactions if they come in direct contact with one another.

Industrial Hygiene – A science that deals with the anticipation, recognition, evaluation, and control of hazards in the workplace. These hazards may cause sickness, harm to employee health, discomfort, and inefficient performance on the job. Also known as *occupational hygiene*.

Ingestion – The swallowing of a substance.

Inhalation – The breathing in of an airborne gas, vapour, fume, mist or dust.

Injection – To force or drive liquid or gas into the body.

Injury Analysis – The process of systematically evaluating injury statistics to identify trends in such areas as:

- ▶ age, gender, occupation of those getting injured on the job
- ▶ part of body involved
- ▶ machinery involved
- ▶ process or work activity involved
- ▶ time of day
- ▶ location
- ▶ frequency (see injury frequency rate)
- ▶ severity (see injury severity rate)

Injury Frequency Rate – The number of compensable injuries per 200,000 employee-hours of exposure. The following formula is used to calculate the injury frequency rate:

$$\frac{\text{Number of Compensable Injuries X 200,000 Hours}}{\text{Total Hours Worked}}$$

Injury Severity Rate – A number that relates total days lost due to compensable injuries to the total hours worked during a specific period. The following formula is used to calculate the injury severity rate:

$$\frac{\text{Number of Days Lost X 200,000 Hours}}{\text{Total Hours Worked}}$$

Inspection – See *workplace inspection*.

Irritant – A substance which, in sufficient quantities, can inflame or irritate the eyes, skin or respiratory system (lungs, etc.). Symptoms include pain and reddening.

Job – The sum of all tasks carried out by a person toward the completion of some goal.

Job Design – The planning of a job and the establishment of procedures for performing that job so that the potential for injury and illness is reduced or eliminated. See also *ergonomics*.

Job Enrichment – Adding one or more related tasks or functions to an existing job. These may include some managerial functions (for example, planning, organizing, controlling).

Job Hazard Analysis – See *task analysis*.

Job Rotation – Moving an employee to one or more related jobs during a work shift.

Joint Health and Safety Committee – A committee established under provisions of the *Occupational Health and Safety Act of Ontario*. Joint health and safety committees are generally required in workplaces with 20 or more workers. At least half the members of the committee must be workers who do not exercise managerial functions; the worker members must be selected by the workers or, where there is one, the trade union. Management must appoint the remaining members from among persons who exercise managerial functions. The responsibilities and powers of joint committees include: obtaining information on workplace hazards, identifying workplace hazards, and recommending how to make the workplace safer and healthier. See also *health and safety representative*.

Latent Period – The time that passes between exposure to a harmful substance or agent and the first sign(s) of damage or illness. Also known as *incubation period*.

Legal Requirement – Anything that is demanded of a person or organization by statute, regulation, common law, or by-law.

Liquid – A formless fluid that takes the shape of its container, but does not necessarily fill it.

Local Exhaust Ventilation – See *ventilation*.

Localized – Restricted to one spot or area in the body and not spread throughout it. Compare with *systemic*.

Lockout – A specific set of procedures for ensuring that a machine, once shut down for maintenance, repair or other reason, is secured against accidental start-up or movement of any of its parts for the length of the shutdown.

Loss Control – Measures taken to prevent and reduce loss. Loss may occur through injury and illness, property damage, poor work quality, etc.

Material Safety Data Sheet (MSDS) – A form that contains detailed information about the possible health and safety hazards of a product and how to safely store, use and handle the product. Under the federal Hazardous Products Act, suppliers are required to provide MSDSs for all hazardous materials, as a condition of sale.

Medical Surveillance – The systematic approach to monitoring health changes in workers to identify and determine which effects may be work-related.

Melting Point – The temperature at which a solid changes to a liquid. For mixtures, a range of temperatures may be given.

Minutes – A written record of the outcome of a meeting. Minutes of joint health and safety committee meetings are required, by law, to be kept and made available to a Ministry of Labour Inspector for review.

Mist – Small droplets of a liquid that can remain suspended in air. Mists can form when a vapour condenses back to its liquid state, or when a liquid breaks up (for example, by splashing or atomizing).

Monitoring – The systematic measurement of health hazards to which workers are exposed. There are two types of measurements that can be taken: biological (worker) and environmental (workplace air).

Musculoskeletal Injuries – Injuries to the system of muscles, tendons, ligaments, joints, bones and related structures of the human body. Also known as *musculoskeletal disorders (MSDs)*.

Mutagen – An agent that causes sudden and permanent changes in one or more hereditary features, generally by modifying one or more genes (changes to genetic material). The changes may or may not be passed on to offspring.

Nature of Injury or Illness – The main physical characteristics of a workplace injury or illness (for example, burn, cut, sprain, dermatitis, hearing loss).

Noise – Unwanted sound that can lead to hearing loss or stress, or interfere with the ability to hear other sounds or to communicate.

Nuisance Dust or Particle – Dust that does not cause disease or harmful effects when exposures are kept at reasonable levels.

Occupational Health – The development, promotion, and maintenance of workplace policies and programs that ensure the physical, mental, and emotional well-being of employees. These policies and programs strive to:

- ▶ prevent harmful health effects because of the work environment
- ▶ protect employees from health hazards while on the job
- ▶ place employees in work environments that are suitable to their physical and mental make-up
- ▶ address other factors that may affect an employee’s health and well-being, such as:
 - ineffective organization of work
 - harassment and violence in the workplace
 - the need to balance work and family responsibilities (e.g., elder care, child care)
- ▶ promote healthy lifestyles

Occupational Hygiene – See *industrial hygiene*.

Occupational Illness – A harmful condition or sickness that results from exposure in the workplace to a biological, chemical, or physical agent or an ergonomic hazard. See *ergonomics*.

Occupational Safety – The maintenance of a work environment that is relatively free from actual or potential hazards that can injure employees.

Oxidizing Agent – A substance that gives up oxygen easily (this oxygen can fuel a fire) or reduces the hydrogen in other compounds. Some examples of oxidizing agents are peroxides, chlorates, perchlorates, nitrates and permanganates. Oxidation and reduction reactions always occur at the same time. See *reducing agent*.

Part of Body – The part of the person’s body that is directly affected by a workplace injury or illness (for example, head, ears, arm, wrist, back, leg, foot).

Parts Per Million (PPM) – Parts of gas or vapour per million parts of air by volume at room temperature. For example, 1 cubic centimetre of gas in 1 million cubic centimetres of air has a concentration of 1 PPM.

Personal Monitoring – A technique used to determine an individual’s personal exposure to a chemical, physical or biological agent. This is done by means of a sampling device worn on the worker’s body (e.g., personal monitor). The monitoring of hazardous chemicals is done at the breathing zone; the monitoring of noise is done at the ears.

Personal Protective Equipment (PPE) – Any device worn by a worker to protect against hazards. Some examples are: respirators, gloves, ear plugs, hard hats, safety goggles and safety shoes.

Physical Agent – A source of energy (for example, noise, radiation, vibration, heat) that affects the body, a part of the body, or any of its functions. The effects may be beneficial or harmful.

Policy – See *health and safety policy*.

Practice – A set of guidelines that are helpful in carrying out a specific type of work.

Prescribed – As set out in the regulations under any Act.

Preventive Maintenance – A system for preventing machinery and equipment failure through:

- ▶ scheduled regular maintenance
- ▶ knowledge of reliability of parts
- ▶ maintenance of service records
- ▶ scheduled replacement of parts
- ▶ maintenance of inventories of the least reliable parts and parts scheduled for replacement

Procedure – A step-by-step description of how to do a task, job, or activity properly.

Program – See *health and safety program*.

Protective Hand Cream – See *barrier cream*.

Quorum – The minimum number of management and worker members that the joint health and safety committee determines must be present in order to carry out its business.

Radiation – The energy transmitted by waves through space or some medium. There are two types of radiation: ionizing (for example, X-Rays or radiation from a radioactive device), and non-ionizing radiation (for example, infra-red radiation, ultra-violet radiation).

Reactivity – The capability of a substance to undergo a chemical reaction with the release of energy. Unwanted effects include: pressure build-up, temperature increase, and formation of harmful by-products. These effects may occur because of the reactivity of a substance to heat, an ignition source, or direct contact with other chemicals in use or in storage.

Reason to Believe – A conviction or belief that does not require empirical support or evidence.

Reasonable Grounds to Believe – A conviction or belief that requires empirical support or evidence.

Reducing Agent – A substance that accepts oxygen or gives up hydrogen during a chemical reaction. Oxidation and reduction always occur at the same time. See *oxidizing agent*.

Repetitive Strain Injury – A problem with the muscles, tendons or nerves that happens over time due to overuse. Examples of repetitive strain injuries include: carpal tunnel syndrome and tendonitis.

Reproductive Hazards – Any material that can affect the development of sperm and egg cells. This can lead to an inability to have children, birth defects and other harmful changes.

Respirable Particles – Small particles that can be breathed in and reach parts of the respiratory system where they may have a harmful effect (for example, the lungs).

Risk – The probability of a worker suffering an injury or health problem, or of damage occurring to property or the environment as a result of exposure to or contact with a hazard.

Root Cause – The real or underlying cause(s) of an event. Distinguished from immediate cause(s) which are usually quite apparent.

Route of Entry – The method by which a contaminant can enter the body. There are four main routes of entry. Contaminants can be breathed in, swallowed, absorbed through the skin, or injected into the bloodstream.

Safety – See *occupational safety*.

Sampling – The process of taking small representative quantities of a gas, liquid, or solid for the purpose of analysis.

Sensitizer – A substance which on first exposure causes little or no reaction in humans or test animals. However, on repeated exposure, it may cause a marked response not necessarily limited to the contact site. Skin sensitization (for example, to a metal such as nickel) is the most common form of sensitization in the workplace. Respiratory sensitization to a few chemicals (for example, isocyanates) is also known to occur.

Severity – See *injury severity rate*.

Short Term Exposure Value (STEV) – See *exposure values*.

Skin – A notation sometimes used with Threshold Limit Value (TLV) or Time-Weighted Average Exposure Value (TWAEV) exposure data. It indicates that the substance may be absorbed by the skin, mucous membranes and eyes. This additional exposure must be considered part of the total exposure to avoid exceeding the TLV or TWAEV for that substance.

Solvent – A substance that dissolves other substances. Many solvents are flammable.

Source of Injury or Illness – The object, substance, exposure, or body motion that directly caused a workplace injury or illness (for example, boxes, powered hand tools, acids, lead, cold, running, walking).

Stable – The tendency of a material to remain in the same form under reasonable conditions of storage or use. Compare with *unstable*.

Standard – A guideline, rule, principle, or model that is used as a means to compare, measure or judge performance, quality, quantity, etc.

Static Electricity – An electrical charge that cannot move. This charge will eventually develop enough energy to jump as a spark to a nearby grounded or less highly charged object. If sparks occur in an ignitable vapour or dust mixture, it can cause an explosion or fire.

Stress – A set of physical reactions that take place in the body in response to demands that are placed on it. These reactions prepare the body for action.

Stressor – A source of stress.

Substitution – The replacement of toxic or hazardous materials, equipment or processes with those that are less harmful.

Synergistic Effects – The health effects of two or more substances or agents that are greater than the sum of their separate effects.

Synonym – Another name or names by which a material is known. For example, methyl alcohol is also known as methanol or wood alcohol.

Systemic – Spread throughout the body; affecting one or more body parts or systems. Compare with *localized*.

Task – A set of related steps that make up a discrete part of a job. Every job is made up of a collection of tasks. For example, answering a phone or entering data into a computer are tasks of a secretary’s job.

Task Analysis – A technique used to identify, evaluate, and control health and safety hazards linked to particular tasks. A task analysis systematically breaks tasks down into their basic components. This allows each step of the process to be thoroughly evaluated. Also known as *job task analysis*.

Teratogen – An agent that causes birth defects by harming the unborn child. See also *embryotoxin*.

Terms of Reference – A written statement of the functions and operating procedures of a committee.

Thinner – A liquid (usually solvent-based) that is used to dilute paint, varnish, cement or other material to a desired consistency. Most thinners are flammable.

Threshold Limit Value (TLV) – A threshold limit value refers to the airborne concentration of a substance to which it is believed that nearly all workers may be repeatedly exposed day after day (for 8 hours per day) without harmful effect. Because of individual susceptibility, however, a small percentage of workers may experience discomfort from substances in concentrations at or below the threshold limit. A smaller percentage may be affected more seriously by aggravation of a pre-existing condition or by the development of an occupational illness.

Time-Weighted Average Exposure Value (TWAEV) – See *exposure values*.

Toxic – Harmful or poisonous.

Toxic Substance – Any substance that can cause acute or chronic effects to a person or is suspected to cause disease or injury under certain conditions.

Trade Name – The trademark name or commercial name for a material.

Type of Injury/Illness – The event that directly resulted in a workplace injury or illness (for example, struck against, caught in, over-exertion).

Unilateral Work Stoppage – Stoppage of work under the direction of either the worker certified member or the management certified member when the member has reason to believe that dangerous circumstances exist.

Unstable – The tendency of a material to break down or to undergo other unwanted chemical changes during normal handling or storage. Compare with *stable*.

Vapour – The form that a gas or liquid takes when it evaporates into the air.

Ventilation – The supplying and exhausting of air at the same time to an enclosed machine, room, or an entire building. There are two types of ventilation:

- ▶ **General or Dilution:** The air contaminants are diluted by natural or mechanical air exchange in the plant. This method is not appropriate for highly toxic contaminants.
- ▶ **Local Exhaust:** The contaminant is captured at its source, usually by the use of hoods, ducts or vents located near or directly over the source. This is the preferred method where toxic contaminants are released and there is the potential for worker exposure.

Vibration – The back and forth motion of an object (for example, tool, machinery or other piece of equipment) that occurs in a predictable pattern or manner. Over-exposure to vibration can harm a part of the body (for example, the fingers) or it can affect the whole body.

Volatility – The tendency or ability of a liquid to quickly vapourize into the air. Examples of volatile liquids include alcohol and gasoline. Liquids that are volatile must be carefully dispensed and stored. This includes paying special attention to temperature.

Work Practices – Procedures for carrying out specific tasks which, when followed, will ensure that a worker’s exposure to hazardous situations, substances or physical agents is controlled by the manner in which the work is carried out.

Work Refusal – The right of a worker to refuse to work when the worker has reason to believe that he or she would be endangered by performing that work.

Working Surface – A surface or plane on which an employee walks or works.

Workplace Design – The planning of workplace environments, structures and equipment so that the potential for injury and illness is reduced or eliminated. See also *ergonomics*.

Workplace Hazardous Materials Information System (WHMIS) – An information system implemented under the federal Hazardous Products Act and provincial occupational health and safety laws to ensure communication of information on hazardous materials. The information delivery system under WHMIS requires 1) labels, 2) material safety data sheets (MSDSs), and 3) worker education and training programs.

Workplace Inspection – A regular and careful check of a workplace or part of a workplace in order to identify health and safety hazards and to recommend corrective action. Workplace factors that have the potential to cause injury or illness to employees include: equipment, materials, processes or work activities, and the environment.

Zero Energy State – The state in which a machine has been made temporarily incapable of accidental start-up or movement. This state is achieved by shutting off or disconnecting all power sources, and draining, bleeding or blocking all residual energy sources such as: gravity, hydraulics, compressed air, springs, and capacitors.

Zero Exposure – Exposure that is restricted to so low a level that it requires little or no attention.

For More Information

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