
Professional Certificate in Health and Safety Compliance

Introduction To Health And Safety Management

Accident – An unplanned event that results in injury, illness, or property damage.

Related terms: incident, near miss.

Explanation: Accidents are the primary focus of health-and-safety programs because they indicate a failure in control measures.

Example: A worker slips on a wet floor and fractures a wrist.

Practical application: Conduct root-cause analysis, implement housekeeping procedures, and provide appropriate footwear.

Challenges: Distinguishing between a true accident and a reported “incident” that may be under-recorded.

Administrative Controls – Management-oriented actions that reduce exposure to hazards without eliminating the hazard itself.

Related terms: engineering controls, PPE.

Explanation: These controls include policies, training, job rotation, and work-schedule adjustments.

Example: Implementing a “no-phone” rule in a hazardous area to minimize distraction.

Practical application: Develop clear written procedures and enforce compliance through supervision.

Challenges: Reliance on employee behavior; effectiveness can wane without regular reinforcement.

Airborne Contaminants – Substances present in the air that can be inhaled and cause health effects.

Related terms: dust, fumes, vapors.

Explanation: Includes dust from wood, silica, metal fumes, and organic vapors.

Example: Silica dust generated during concrete cutting.

Practical application: Use local exhaust ventilation, respiratory protection, and regular air monitoring.

Challenges: Maintaining ventilation efficiency and ensuring workers wear respirators correctly.

Audit – A systematic, independent review of an organization’s health-and-safety performance.

Related terms: inspection, review.

Explanation: Audits assess compliance with legislation, policies, and best practices, often using checklists.

Example: A quarterly internal audit of fire-extinguisher maintenance records.

Practical application: Schedule audits, assign auditors, document findings, and track corrective actions.

Challenges: Auditor bias, limited resources, and failure to follow up on recommendations.

Behaviour-Based Safety (BBS) – An approach that focuses on observing and influencing safe behaviours.

Related terms: observation, reinforcement.

Explanation: BBS uses positive reinforcement to encourage safe actions and reduce risky behaviours.

Example: A supervisor notes a worker correctly using a lock-out/tag-out procedure and provides immediate feedback.

Practical application: Train observers, establish clear criteria, and record observations in a database.

Challenges: Ensuring observations are objective and avoiding a “tick-box” mentality.

Biological Hazard – Any biological agent that poses a risk to health, such as bacteria, viruses, fungi, or toxins.

Related terms: infectious disease, pathogen.

Explanation: Common in healthcare, laboratories, and food-processing environments.

Example: Exposure to hepatitis B virus through a needlestick injury.

Practical application: Implement vaccination programs, sharps disposal systems, and standard precautions.

Challenges: Rapidly emerging pathogens and maintaining up-to-date protocols.

Board of Directors – The governing body that holds ultimate responsibility for health-and-safety performance in an organization.

Related terms: senior management, governance.

Explanation: Directors set strategic safety objectives, allocate resources, and monitor key performance indicators.

Example: Approving a \$200,000 investment in an automated material-handling system to reduce manual lifting.

Practical application: Include safety metrics in board agendas and require regular reporting from the safety manager.

Challenges: Competing business priorities and limited safety expertise among board members.

Brand-New Hazard – A previously unidentified risk that emerges due to changes in processes, equipment, or regulations.

Related terms: new risk, emerging hazard.

Explanation: Identified through risk assessments, incident investigations, or regulatory updates.

Example: Introduction of a high-speed cutter that creates finer dust particles than previously encountered.

Practical application: Conduct a fresh risk assessment, update controls, and train staff on the new hazard.

Challenges: Detecting subtle changes and ensuring timely communication across the organization.

Broadcast Safety Message – A communication method that disseminates critical safety information to a wide audience quickly.

Related terms: alert, announcement.

Explanation: May use email, text, PA system, or digital signage.

Example: Sending an SMS alert about a chemical spill in the plant’s loading dock.

Practical application: Maintain an up-to-date contact list and predefined message templates.

Challenges: Message fatigue, ensuring receipt, and verifying comprehension.

Business Continuity Plan (BCP) – A strategy that ensures essential functions continue during and after a disruption.

Related terms: disaster recovery, resilience.

Explanation: Incorporates health-and-safety considerations such as evacuation routes and emergency supplies.

Example: A BCP that includes backup power for critical ventilation systems during a storm.

Practical application: Conduct regular drills, review supply chain dependencies, and update the plan after each incident.

Challenges: Balancing cost with preparedness and maintaining relevance as operations evolve.

Carcinogen – Any substance or agent that can cause cancer in humans or animals.

Related terms: mutagen, toxicant.

Explanation: Classified by agencies such as IARC and OSHA; exposure limits are often set.

Example: Asbestos fibers inhaled during demolition work.

Practical application: Substitute safer materials, implement containment, and use respiratory protection.

Challenges: Detecting low-level exposures and dealing with legacy contamination.

Cascading Failure – A chain reaction where a failure in one system leads to subsequent failures in other systems.

Related terms: domino effect, systemic risk.

Explanation: Common in complex industrial settings where interdependent equipment exists.

Example: Failure of a cooling system causing overheating of electrical panels, leading to fire.

Practical application: Perform hazard-identification studies that map interdependencies and install redundant safeguards.

Challenges: Predicting indirect effects and allocating resources for low-probability scenarios.

Cause-Effect Diagram – A visual tool (often called a fishbone diagram) used to identify root causes of a problem.

Related terms: root-cause analysis, Ishikawa.

Explanation: Organises potential causes into categories such as methods, equipment, people, and environment.

Example: Mapping factors contributing to a repetitive-strain injury.

Practical application: Facilitate brainstorming sessions with multidisciplinary teams and document findings.

Challenges: Over-reliance on the diagram without verification and difficulty in quantifying each cause.

Change Management – The systematic approach to transitioning individuals, teams, and organizations to a new state.

Related terms: transition, implementation.

Explanation: In health-and-safety, it ensures new processes or equipment are introduced safely.

Example: Introducing a new chemical that requires revised handling procedures.

Practical application: Conduct a risk assessment before implementation, provide training, and monitor compliance.

Challenges: Resistance to change, inadequate communication, and insufficient training resources.

Chemical Hygiene Plan (CHP) – A written program that outlines procedures for safely handling hazardous chemicals.

Related terms: lab safety, SDS.

Explanation: Required by OSHA for laboratories; includes training, exposure monitoring, and emergency response.

Example: A university's CHP that mandates use of fume hoods for volatile solvents.

Practical application: Keep safety data sheets (SDS) readily accessible and conduct regular inspections of containment equipment.

Challenges: Keeping the plan current with new chemicals and ensuring all personnel understand their responsibilities.

Confined Space – An area with limited entry and exit, not designed for continuous occupancy, and may contain hazardous atmospheres.

Related terms: permit-space, enclosure.

Explanation: Examples include tanks, pits, and sewer lines.

Example: A maintenance worker entering a silo to inspect structural integrity.

Practical application: Perform atmospheric testing, develop a permit-space system, and provide rescue equipment.

Challenges: Atmospheric monitoring equipment failure and inadequate rescue training.

Control of Substances Hazardous to Health (COSHH) – UK legislation requiring employers to control exposure to hazardous substances.

Related terms: risk assessment, exposure limit.

Explanation: Requires identification, assessment, and implementation of control measures.

Example: Using a ventilated enclosure to contain lead-based paint sanding dust.

Practical application: Maintain an inventory of hazardous substances, conduct regular exposure monitoring, and provide appropriate PPE.

Challenges: Keeping records up-to-date and interpreting complex regulatory guidance.

Corrective Action – A step taken to eliminate the cause of a detected non-conformance or incident.

Related terms: remediation, improvement.

Explanation: Often derived from audit findings, incident investigations, or risk assessments.

Example: Re-training staff after a near-miss involving improper ladder use.

Practical application: Assign responsibility, set deadlines, and verify completion through follow-up audits.

Challenges: Tracking actions across multiple departments and ensuring they are not merely "paper-based".

Critical Incident – An event that results in serious injury, fatality, or significant property damage.

Related terms: major accident, catastrophe.

Explanation: Requires immediate reporting to authorities and may trigger legal investigations.

Example: A factory explosion causing multiple fatalities.

Practical application: Activate emergency response plans, conduct a thorough investigation, and

communicate findings to stakeholders.

Challenges: Managing media attention, supporting affected families, and restoring operations.

Critical Path Method (CPM) – A project-management technique that identifies the sequence of tasks that determines the minimum project duration.

Related terms: schedule, timeline.

Explanation: In safety projects, CPM helps allocate resources to high-impact activities.

Example: Planning the installation of a safety-guarding system where certain tasks cannot be delayed.

Practical application: Use software to map tasks, identify dependencies, and monitor progress.

Challenges: Inaccurate task duration estimates and failure to account for unexpected delays.

Culture of Safety – The shared values, beliefs, and behaviours that determine the commitment to safety at all organizational levels.

Related terms: climate, mindset.

Explanation: A strong safety culture encourages reporting, learning, and proactive risk management.

Example: Employees regularly reporting near-misses without fear of reprisal.

Practical application: Leadership walk-about, transparent communication, and recognition programs.

Challenges: Overcoming entrenched attitudes, aligning incentives, and measuring cultural change.

Decontamination – The process of removing or neutralising hazardous substances from personnel, equipment, or areas.

Related terms: clean-up, sanitation.

Explanation: Essential after spills, biological exposures, or radiological incidents.

Example: Using an emergency shower to rinse a worker after a chemical splash.

Practical application: Establish decontamination stations, train staff on procedures, and maintain necessary supplies.

Challenges: Ensuring proper disposal of contaminated waste and preventing cross-contamination.

Deficiency – A shortfall or failure to meet a required standard, regulation, or internal policy.

Related terms: non-conformance, gap.

Explanation: Identified during audits, inspections, or incident investigations.

Example: Missing fire-extinguisher inspection tags.

Practical application: Document the deficiency, assign corrective action, and verify remediation.

Challenges: Prioritising multiple deficiencies and avoiding repeated occurrences.

Diagnostic Hazard – A risk associated with the use of diagnostic equipment or procedures, such as radiation exposure from X-rays.

Related terms: radiation, imaging.

Explanation: Requires specific controls to protect both patients and operators.

Example: A radiographer exceeding dose limits due to improper shielding.

Practical application: Conduct dose-monitoring, maintain equipment calibration, and provide lead aprons.

Challenges: Balancing diagnostic quality with dose minimisation.

Disaster Recovery – The set of policies and procedures to restore normal operations after a catastrophic event.

Related terms: BCP, resilience.

Explanation: Focuses on IT systems, utilities, and critical safety infrastructure.

Example: Restoring backup power to fire-suppression systems after a flood.

Practical application: Maintain off-site data backups, test restoration processes, and coordinate with emergency services.

Challenges: Coordinating multiple agencies and ensuring backup equipment is functional.

Document Control – The systematic management of documents to ensure they are accurate, current, and accessible.

Related terms: revision, archive.

Explanation: Applies to policies, procedures, risk assessments, and training records.

Example: Updating the lock-out/tag-out procedure after a new machine is installed.

Practical application: Use a centralized electronic system with version tracking and access permissions.

Challenges: Preventing use of obsolete documents and ensuring staff are aware of updates.

Ergonomics – The scientific discipline concerned with designing workstations, tools, and tasks to fit human capabilities and limitations.

Related terms: human factors, workstation design.

Explanation: Reduces musculoskeletal disorders and improves productivity.

Example: Adjustable height workbenches for assembly line workers.

Practical application: Conduct ergonomic assessments, provide adjustable equipment, and train employees on proper posture.

Challenges: Cost of ergonomic solutions and employee resistance to new equipment.

Emergency Response Plan (ERP) – A documented set of actions to be taken during emergencies such as fires, spills, or natural disasters.

Related terms: evacuation, crisis management.

Explanation: Defines roles, communication channels, and resource requirements.

Example: A protocol for evacuating a chemical plant when a toxic release is detected.

Practical application: Conduct regular drills, maintain emergency supplies, and review the plan after each incident.

Challenges: Keeping the plan relevant to evolving hazards and ensuring all personnel are familiar with it.

Engineering Controls – Physical modifications to equipment, processes, or the workplace that reduce or eliminate hazards.

Related terms: substitution, isolation.

Explanation: Considered higher in the hierarchy of controls than administrative measures.

Example: Installing a guard on a moving saw blade.

Practical application: Perform a hazard analysis, select appropriate controls, and verify effectiveness through testing.

Challenges: High upfront cost and need for regular maintenance.

Environmental Impact Assessment (EIA) – A systematic study to predict the environmental consequences of proposed projects or activities.

Related terms: impact study, sustainability.

Explanation: In health-and-safety contexts, it helps identify risks to workers and surrounding communities.

Example: Assessing the impact of a new waste-incineration plant on air quality.

Practical application: Engage stakeholders, prepare mitigation measures, and monitor post-implementation effects.

Challenges: Balancing economic benefits with environmental protection and obtaining accurate baseline data.

Exposure Limit – The maximum concentration of a hazardous substance to which workers may be exposed over a specified time.

Related terms: TWA, STEL.

Explanation: Established by regulatory bodies such as OSHA, ACGIH, or EU directives.

Example: An 8-hour time-weighted average (TWA) of 50 ppm for benzene.

Practical application: Conduct air monitoring, compare results to limits, and adjust controls if exceeded.

Challenges: Variability in workplace conditions and the need for frequent monitoring.

Fatality – The death of an employee or other person as a direct result of a work-related incident.

Related terms: death, loss of life.

Explanation: Triggers mandatory reporting, investigations, and often regulatory penalties.

Example: A construction worker killed by a falling object.

Practical application: Perform a thorough investigation, implement corrective actions, and provide support to affected families.

Challenges: Emotional impact on the workforce and potential legal ramifications.

Fire Risk Assessment – A systematic evaluation of fire hazards, likelihood, and potential consequences to determine appropriate controls.

Related terms: fire safety, hazard analysis.

Explanation: Considers sources of ignition, fuel, and means of escape.

Example: Identifying flammable solvents stored near heat sources in a laboratory.

Practical application: Install fire detection systems, maintain fire-extinguishers, and train staff in fire-response procedures.

Challenges: Keeping the assessment current as processes change.

Fit for Work – A determination that an employee is medically and physically capable of performing their job

safely.

Related terms: medical clearance, pre-employment screening.

Explanation: May involve health questionnaires, physical exams, or functional tests.

Example: A driver undergoing vision and hearing tests before operating a commercial vehicle.

Practical application: Establish clear policies, maintain confidentiality, and update assessments periodically.

Challenges: Balancing privacy rights with safety needs and managing accommodations.

Flammable Substance – Any material that can ignite and sustain combustion under defined conditions.

Related terms: combustible, ignition source.

Explanation: Classified by flash point, auto-ignition temperature, and vapour pressure.

Example: Ethanol with a flash point of 13 °C.

Practical application: Store in approved containers, label correctly, and implement spill-control measures.

Challenges: Controlling static electricity and ensuring proper ventilation.

Hazard Identification (HAZID) – The process of recognizing hazards that could cause injury, illness, or damage.

Related terms: risk identification, HAZOP.

Explanation: Uses techniques such as checklists, brainstorming, and walkthroughs.

Example: Identifying the risk of pinch points on a conveyor system.

Practical application: Document identified hazards, assign risk ratings, and develop control plans.

Challenges: Overlooking low-probability hazards and under-estimating cumulative effects.

Hazardous Area Classification – The categorisation of locations based on the presence of explosive gases, vapours, or dust.

Related terms: ATEX, Zone, Class.

Explanation: Determines the type of equipment and protective measures required.

Example: A Zone 1 area where flammable gas may be present continuously.

Practical application: Conduct gas monitoring, select intrinsically safe equipment, and post appropriate signage.

Challenges: Changing processes that alter classification and maintaining compliance with multiple standards.

Health Surveillance – Ongoing monitoring of workers' health to detect early signs of occupational disease.

Related terms: medical monitoring, screening.

Explanation: Required when exposure to certain hazards is known to cause disease.

Example: Periodic lung-function tests for workers exposed to respirable silica.

Practical application: Establish a surveillance program, maintain confidential records, and act on abnormal findings.

Challenges: Ensuring participation, interpreting data, and managing costs.

Hierarchical Controls – The ordered set of strategies for hazard mitigation, from most to least effective.

Related terms: control hierarchy, elimination.

Explanation: The hierarchy includes elimination, substitution, engineering controls, administrative controls, and PPE.

Example: Replacing a solvent with a less toxic alternative (substitution) before resorting to respirators.

Practical application: Use the hierarchy as a decision-making framework during risk assessments.

Challenges: Organizational pressure to adopt cheaper, lower-level controls.

Incident – An unplanned event that may or may not result in injury, illness, or damage.

Related terms: accident, near miss.

Explanation: All incidents provide learning opportunities; they are recorded for trend analysis.

Example: A forklift hitting a pallet without causing injury.

Practical application: Report promptly, investigate root causes, and share lessons learned.

Challenges: Under-reporting due to fear of blame or lack of awareness.

Inspection – A systematic examination of workplaces, equipment, or procedures to verify compliance with standards.

Related terms: audit, walkthrough.

Explanation: Can be routine, targeted, or triggered by an incident.

Example: Monthly inspection of fire-alarm panels.

Practical application: Use checklists, assign competent inspectors, and document findings.

Challenges: Maintaining objectivity and ensuring corrective actions are implemented.

International Standards Organization (ISO) – A global body that develops voluntary consensus standards, including those for occupational health and safety.

Related terms: ISO 45001, certification.

Explanation: ISO 45001 provides a framework for an occupational health and safety management system (OHSMS).

Example: Achieving ISO 45001 certification to demonstrate commitment to safety excellence.

Practical application: Align internal processes with ISO clauses, conduct internal audits, and pursue external certification.

Challenges: Interpreting the standard's clauses and integrating them with existing legal requirements.

Job Hazard Analysis (JHA) – A step-by-step review of a specific job to identify hazards and recommend controls.

Related terms: task analysis, risk assessment.

Explanation: Breaks the job into individual steps, evaluates each for potential risks.

Example: Analyzing the steps involved in changing a light fixture on a high ladder.

Practical application: Involve workers who perform the task, document controls, and provide training.

Challenges: Time-consuming for complex jobs and keeping analyses up-to-date.

Key Performance Indicator (KPI) – A measurable value that demonstrates how effectively an organization is

achieving safety objectives.

Related terms: metric, dashboard.

Explanation: Common safety KPIs include Lost Time Injury Frequency Rate (LTIFR) and near-miss reporting rate.

Example: Tracking a 10% reduction in LTIFR over a fiscal year.

Practical application: Set realistic targets, collect reliable data, and review regularly with management.

Challenges: Data integrity and avoiding “target-setting” that encourages under-reporting.

Lock-out/Tag-out (LOTO) – A safety procedure to ensure that machinery is properly shut off and cannot be started up again before maintenance or repair work is completed.

Related terms: energy isolation, isolation procedure.

Explanation: Involves physically locking the energy source and posting a warning tag.

Example: Applying a lock to a motor’s disconnect switch before replacing a bearing.

Practical application: Develop a LOTO program, train employees, and audit compliance regularly.

Challenges: Employee complacency and failure to follow procedures during shift changes.

Machine Guarding – Physical barriers or devices that prevent contact with moving parts of equipment.

Related terms: protective device, safety shield.

Explanation: Guards must be fixed, interlocked, or removable only with proper procedures.

Example: A fixed metal guard covering the point of operation on a band saw.

Practical application: Conduct a guard-assessment, install appropriate devices, and label guarded areas.

Challenges: Balancing accessibility for maintenance with protection and ensuring guards are not removed for convenience.

Material Safety Data Sheet (MSDS) – A document that provides detailed information on the properties, hazards, handling, and emergency measures for a chemical.

Related terms: SDS, safety data sheet.

Explanation: Required by regulations such as OSHA’s Hazard Communication Standard.

Example: An MSDS for a cleaning solvent indicating skin-irritation hazards and first-aid measures.

Practical application: Store MSDSs at the point of use, train staff on reading them, and keep them updated.

Challenges: Managing large inventories and ensuring the most recent version is available.

Medical Surveillance Program – A structured system for monitoring workers’ health in relation to workplace exposures.

Related terms: health monitoring, occupational health.

Explanation: Includes baseline examinations, periodic testing, and follow-up for abnormal results.

Example: Audiometric testing for employees exposed to high noise levels.

Practical application: Develop protocols, maintain confidential records, and integrate findings with risk management.

Challenges: Employee privacy concerns and ensuring consistent participation.

Near Miss – An unplanned event that could have resulted in injury, illness, or damage but did not.

Related terms: close call, incident.

Explanation: Near-miss reporting is vital for proactive hazard identification.

Example: A worker narrowly avoiding a falling object because they stepped aside at the last moment.

Practical application: Encourage reporting through a non-punitive system, analyse trends, and implement preventive measures.

Challenges: Cultural barriers that view near-misses as “not serious enough” to report.

Non-Destructive Testing (NDT) – Inspection techniques that evaluate the integrity of equipment without causing damage.

Related terms: ultrasonic, radiography.

Explanation: Used for detecting cracks, corrosion, or other defects in critical components.

Example: Using ultrasonic testing to assess the thickness of a pressure vessel wall.

Practical application: Schedule regular NDT, certify technicians, and maintain records of findings.

Challenges: High equipment costs and interpretation of results.

Occupational Health – The branch of public health that focuses on the relationship between work and health.

Related terms: workplace health, occupational medicine.

Explanation: Encompasses disease prevention, health promotion, and rehabilitation.

Example: Implementing a wellness program that includes ergonomic assessments and stress-management workshops.

Practical application: Integrate occupational health services with safety programs and track health outcomes.

Challenges: Coordinating multiple stakeholders and measuring long-term health benefits.

Occupational Safety and Health Administration (OSHA) – The U.S. federal agency responsible for enforcing workplace safety and health regulations.

Related terms: regulation, compliance.

Explanation: Provides standards, guidance, and enforcement mechanisms.

Example: OSHA’s General Industry Standard (29 CFR 1910) covering machine guarding.

Practical application: Conduct OSHA-compliant inspections, maintain records, and respond to citations.

Challenges: Keeping up with regulatory updates and managing inspection readiness.

Personal Protective Equipment (PPE) – Equipment worn by workers to protect against hazards that cannot be eliminated or controlled by other means.

Related terms: protective gear, safety equipment.

Explanation: Includes helmets, gloves, eye protection, hearing protectors, and respiratory devices.

Example: Providing flame-resistant clothing to welders.

Practical application: Conduct a PPE risk assessment, select appropriate items, train on correct use, and maintain equipment.

Challenges: Ensuring proper fit, preventing misuse, and balancing comfort with protection.

Permit-to-Work (PTW) – A formal written system that authorises specific high-risk activities only after safety checks are completed.

Related terms: authorization, hot work permit.

Explanation: Controls activities such as confined-space entry, hot work, and electrical isolation.

Example: Issuing a hot-work permit before welding in a tank farm.

Practical application: Define permit requirements, assign issuers and receivers, and enforce strict sign-off procedures.

Challenges: Permit fatigue, inadequate verification, and bypassing the system under pressure.

Plan-Do-Check-Act (PDCA) – A continuous improvement cycle used to manage and improve health-and-safety performance.

Related terms: deming cycle, improvement loop.

Explanation: Involves planning actions, implementing them, checking results, and acting on findings.

Example: Planning a new safety training, delivering it, reviewing test scores, and revising content based on gaps.

Practical application: Embed PDCA in all safety processes, from risk assessments to incident investigations.

Challenges: Maintaining momentum and ensuring each phase receives adequate attention.

Pre-Employment Screening – The assessment of a candidate's fitness for a particular job before hiring.

Related terms: medical exam, suitability test.

Explanation: May include questionnaires, physical exams, vision/hearing tests, and drug screens.

Example: Testing for colour-vision deficiency for a role that requires signal-light interpretation.

Practical application: Align screening with job requirements and legal standards, and keep records confidential.

Challenges: Avoiding discrimination while ensuring safety, and handling borderline cases.

Procedural Safety – The use of documented steps and standard operating procedures (SOPs) to control hazards.

Related terms: process safety, work instruction.

Explanation: Relies on consistent execution of proven methods.

Example: A SOP for safely disconnecting a high-voltage circuit.

Practical application: Develop clear SOPs, train staff, and perform periodic compliance checks.

Challenges: Keeping procedures current and ensuring they are not bypassed for speed.

Process Safety Management (PSM) – A regulatory framework aimed at preventing releases of highly hazardous chemicals.

Related terms: OSHA 1910.119, risk management.

Explanation: Covers elements such as process hazard analysis, mechanical integrity, and emergency planning.

Example: Implementing a PSM program for a refinery handling benzene.

Practical application: Conduct a thorough process hazard analysis, maintain safety-instrumented systems, and train operators.

Challenges: Integrating PSM with broader OHS programs and managing complex documentation.

Probable Cause – The legal standard used to determine whether an incident resulted from negligence or breach of duty.

Related terms: liability, fault.

Explanation: Establishes the direct link between actions (or inactions) and the resulting harm.

Example: Finding that failure to repair a guard rail was the probable cause of a fall.

Practical application: Use thorough investigations to identify causation and support corrective actions.

Challenges: Gathering sufficient evidence and avoiding speculation.

Public Liability Insurance – Coverage that protects an organization against claims arising from injury or damage to third parties.

Related terms: coverage, risk transfer.

Explanation: Often required for businesses that interact with the public or visitors.

Example: A customer slips on a wet floor in a retail store and sues for damages.

Practical application: Review policy limits, ensure adequate coverage, and implement preventive measures to reduce claims.

Challenges: Rising premiums and ensuring policy aligns with actual exposure.

Qualified Person (QP) – An individual who possesses the education, training, and experience to perform specific safety tasks.

Related terms: competent person, specialist.

Explanation: Defined by regulations for tasks such as pressure vessel inspections or electrical work.

Example: A certified welding inspector acting as a QP for weld quality assurance.

Practical application: Verify qualifications, maintain records of competence, and provide ongoing training.

Challenges: Keeping certifications current and covering all critical tasks.

Risk Assessment – The systematic process of evaluating the likelihood and severity of hazards to prioritize control measures.

Related terms: hazard analysis, risk matrix.

Explanation: Involves identifying hazards, estimating risk, and determining appropriate controls.

Example: Assessing the risk of manual handling of heavy boxes and deciding to implement mechanical lifts.

Practical application: Use a standardized risk matrix, involve workers, and review assessments after changes.

Challenges: Subjectivity in risk rating and ensuring assessments are not merely “paper exercises”.

Risk Matrix – A visual tool that plots the probability of an event against its consequence to classify risk levels.

Related terms: risk rating, heat map.

Explanation: Helps prioritise which hazards require immediate attention.

Example: A matrix that categorises a low-probability, high-consequence event as “high risk”.

Practical application: Adopt a consistent matrix across the organization and link it to control-selection criteria.

Challenges: Over-simplification of complex risks and inconsistency in interpretation.

Root-Cause Analysis (RCA) – A systematic investigation to identify the fundamental cause(s) of an incident.

Related terms: causal analysis, 5-Why.

Explanation: Seeks to uncover underlying system failures rather than superficial symptoms.

Example: Using the 5-Why method to trace a ladder fall back to inadequate training and poor supervision.

Practical application: Form a cross-functional team, document findings, and develop corrective actions targeting the root cause.

Challenges: Time constraints and resistance to revealing deeper organisational issues.

Safety Culture Survey – A questionnaire designed to gauge employee perceptions of safety policies, practices, and leadership.

Related terms: climate assessment, feedback tool.

Explanation: Provides insight into strengths and areas needing improvement.

Example: Survey items asking workers whether they feel comfortable reporting hazards.

Practical application: Distribute anonymously, analyse results, share findings, and develop action plans.

Challenges: Low response rates and ensuring candid feedback.

Safety Data Sheet (SDS) – The updated term for the Material Safety Data Sheet, providing detailed safety information on chemicals.

Related terms: MSDS, hazard communication.

Explanation: Structured into 16 sections covering hazards, handling, storage, and disposal.

Example: An SDS for a flammable solvent indicating flash point, required PPE, and spill-response procedures.

Practical application: Store SDSs at the point of use, train employees to interpret them, and keep them current.

Challenges: Managing electronic versus paper copies and ensuring accessibility.

Safety Management System (SMS) – An organized framework that integrates policies, procedures, and resources to achieve safety objectives.

Related terms: OHSMS, ISO 45001.

Explanation: Includes planning, implementation, monitoring, and continual improvement.

Example: A manufacturing plant’s SMS that incorporates hazard identification, training, and performance measurement.

Practical application: Develop a safety policy, set measurable targets, and conduct regular management reviews.

Challenges: Aligning the SMS with business goals and avoiding “paper-only” systems.

Safety Net – A physical or procedural safeguard that protects workers from injury if primary controls fail.

Related terms: secondary control, fall arrest.

Explanation: Examples include harnesses, safety nets under scaffolding, and emergency stop buttons.

Example: Installing a safety net beneath a roofing platform to catch falling workers.

Practical application: Verify that secondary controls are inspected regularly and used correctly.

Challenges: Over-reliance on secondary controls and neglecting primary hazard elimination.

Safety Officer – An individual responsible for implementing and monitoring health-and-safety policies within an organization.

Related terms: HS manager, safety coordinator.

Explanation: May conduct inspections, deliver training, and liaise with regulators.

Example: A safety officer who leads monthly toolbox talks on ergonomics.

Practical application: Define clear roles, provide adequate authority, and support professional development.

Challenges: Balancing administrative duties with proactive hazard mitigation.

Safety Training – Educational programs designed to develop knowledge, skills, and attitudes for safe work practices.

Related terms: induction, competency.

Explanation: Covers topics such as hazard awareness, emergency response, and equipment operation.

Example: A 2-hour refresher course on lock-out/tag-out procedures for maintenance staff.

Practical application: Use blended learning methods, assess comprehension, and keep records of attendance.

Challenges: Ensuring relevance, combating training fatigue, and measuring behavioural change.

Secure Area – A designated space that requires controlled access to protect personnel, equipment, or information.

Related terms: restricted zone, controlled entry.

Explanation: May be used for high-voltage equipment, hazardous chemicals, or sensitive data.

Example: A locked cabinet housing compressed-gas cylinders.

Practical application: Install access-control systems, post signage, and maintain an access-log.

Challenges: Unauthorized entry and ensuring that access controls do not impede emergency response.

Severity – The magnitude of potential harm resulting from