Hazard identification and risk assessment report

One of the root causes of occupational injuries, illnesses and incidents is the lack of identification or recognition of hazards that are present or that might have been expected. A critical element of any effective OSH programme is a proactive, ongoing process to identify and assess such hazards. In order to identify and assess hazards, employers and employees must: collect and review information on the hazards that are present or are likely to be present in the workplace. Perform initial and periodic workplace inspections at work to identify new or recurrent hazards. Investigate injuries, illnesses, incidents and near calls/near misses to determine the underlying hazards, causes and deficiencies in the safety and health programme. Group similar events and identify trends in injuries, diseases and events reported. Consider the dangers of emergencies or non-circumstances. Find the severity and likelihood of events that may occur for each identified hazard, and use this information to prioritize corrective actions. Some hazards, such as cleaning and tripping hazards, can and should be fixed as they are found. Fixing hazards on the ground underscores the importance of health and safety and utilizes a safety leadership opportunity. To learn more about fixing other hazards identified using the processes described here, see Prevention and hazard control. Action point 1: Collection of existing information on hazards at work Action point 2: Investigate the workplace for safety risk Action point 3: Identification of health hazards Action point 4: Carry out incident studies Action point 5: Identify emergencies and non-governmental situations Action point 6: Characterise the nature of identified hazards, Identify temporary control measures and prioritise the dangers of control Action point 1: Collecting existing information on workplace hazards Information on workplace hazards may already be available to employers and workers from both internal and external sources. How to achieve it Collect, organize and review information with workers to determine what types of hazards may be present and which workers may be exposed to or potentially exposed. The information available at work may include: Work manuals for equipment and machinery. Safety data sheets (SDS) supplied by chemical manufacturers. Self-inspection reports and inspection reports from insurance companies, public authorities and consultants. Records of past injuries and diseases, such as OSHA 300 and 301 logs and incident investigation reports. Workers' compensation records and reports. Patterns of frequent injuries and diseases. Exposure monitoring results, assessments of medical records (edited correctly to ensure the patient's/workers' privacy). Existing safety and health programmes (lockout/tagout, enclosed spaces, process safety management, personal protective equipment, etc.). Input from workers, including minutes of the working environment committee meetings. Results of job hazard analyses, also known as job security analyses. Information about hazards may be available from external sources, such as: OSHA, the National Institute for Occupational Safety and Health (NIOSH) and the Centers for Disease Control and Prevention (CDC) websites, publications and warnings. Trade associations. Trade unions, state and local health and safety committees /coalitions (COSH groups) and workers' advocacy groups. Health and safety consultants. Action point 2: Investigate the workplace for safety risks Hazards may be introduced over time as workstations and processes change, equipment or tools become worn, maintenance is overlooked, or cleaning practices decrease. Setting aside time to regularly inspect the workplace for hazards can help identify deficiencies so that they can be remedied before an incident occurs. How to achieve it Perform regular inspections of all operations, equipment, work areas and facilities. Have workers join the inspection team and talk to them about hazards they see or report. Be sure to document inspections so that you can later check that hazardous conditions have been corrected. Take photos or video of problem areas to facilitate later discussion and brainstorming about how to manage them and for use as learning aids. Include all areas and activities in these inspections, such as storage and storage, maintenance of facilities and equipment, procurement and office functions, as well as activities carried out by on-site contractors, subcontractors and temporary employees. Regularly inspect both construction vehicles (e.g. forklifts, powered industrial trucks) and transport vehicles (e.g. cars, trucks). Use checklists that highlight things to look for. Typical hazards fall into several main categories, e.g. each workplace will have its own list: General cleaning Slip, turn, and fall hazards Electrical hazards Equipment operation Equipment maintenance Fire protection Work protection And process flow (including personnel and planning) Work practices Workplace violence Ergonomic problems Lack of emergency procedures Before changing operation, workstations, or workflow;

make major organisational changes or introduce new equipment, materials or processes, seek input from workers and evaluate the planned changes for potential hazards and associated risks. Note: Many hazards can be identified using common knowledge and available tools. For example, you can easily identify and correct hazards associated with broken stair rails and frayed electrical wires. Workers can be a very useful internal resource, especially if they are trained in how to identify and assess risks. Action point 3: Identification of health hazards Identification of workers' exposure to health hazards is typically more complex than identifying physical hazards For example, gases and vapours can be invisible, often have no smell, and may not have a harmful effect. Health hazards include chemical hazards (solvents, adhesives, paints, toxic dust, etc.), physical hazards (noise, radiation, heat, etc.), biological hazards (infectious diseases) and ergonomic risk factors (heavy lifting, repetitive movements, vibrations). Reviewing workers' health records (duly edited to ensure patient/worker's privacy) can be useful in identifying health hazards related to workplace exposure. How to achieve the Identify chemical hazards – review SDS and product labels to identify chemicals in your workplace that have low exposure limits, are highly volatile or used in large quantities or in unventilated spaces. Identify activities that may result in skin exposure to chemicals. Identify physical hazards – identify any exposure to excessive noise (areas where you need to raise your voice to be heard by others), elevated heat (indoors and outdoors) or radiation sources (radioactive materials, X-rays or radio frequency radiation). Identify biological hazards – determine whether workers may be exposed to sources of infectious diseases, moulds, toxic or toxic plants or animal materials (fur or scat) that can cause allergic reactions or occupational asthma. Identify ergonomic risk factors – investigate work activities that require heavy lifting, work above shoulder height, repetitive movements or tasks with significant vibrations. Carry out quantitative exposure assessments , where possible, using air sampling or direct reading instruments. Review medical records – to identify cases of musculoskeletal injuries, skin irritation or dermatitis, hearing loss or lung disease that may be related to workplace exposure. Note: Identification and assessment of health hazards may require specialised knowledge. Small businesses can receive free and confidential occupational safety and health advisory services, including helping to identify and assess workplace hazards, through osha's on-the-spot consultation programme. Action Number 4: Conducting incident investigations Workplace incidents – including injuries, illnesses, close calls/near-misses and reports of other concerns – give a clear indication of where there are hazards. By thoroughly examining incidents and reports, you will identify hazards that may cause future damage. The purpose of an investigation must always be to identify the root causes (and there is often more than one) of the incident or concern, to prevent future incidents. How to achieve it Develop a clear plan and procedure for conducting event investigations so that an investigation can begin immediately when an event occurs. The plan should include topics such as: Who will be involved Lines of communication Materials, equipment and supplies necessary Reporting Forms and Templates Train on incident investigation techniques that emphasise objectivity and openness throughout the investigation process. Conduct studies with a trained team team representatives of both management and workers. Examine close calls/near misses. Identify and analyze the root causes to address underlying program deficiencies that allowed the events to occur. Communicate the results of the survey to managers, supervisors and workers to prevent recurrence. Effective event investigations do not stop by identifying a single factor that triggered an event. They ask the questions Why? and What led to the failure? For example, if a piece of equipment fails, a good study asks: Why did it fail? Was it maintained properly? Was it beyond his lifetime? and How could this failure have been prevented? Similarly, an investigation into a good incident does not stop when it concludes that a worker has made a mistake. It asks such questions as: Was the worker provided with appropriate tools and time to do the work? Was the worker sufficiently trained? and was the worker properly monitored? Note: OSHA has specific reporting requirements for work-related incidents leading to serious injury or death (29 CFR 1904.39). OSHA must be notified within 8 hours of a work-related death and within 24 hours of amputation, eye loss or hospitalisation. Point 5: Identify hazards in emergency and non-governmental situations Emergencies pose hazards to be recognised and understood. Non-pennies or rare tasks, including maintenance and start-up/decommissioning activities, also pose potential hazards. Plans and procedures shall be drawn up to respond appropriately and safely to hazards associated with foreseeable emergencies and out-of-routine situations. How to achieve it Identify predictable emergency scenarios and non-routine tasks, taking into account the types of material and equipment in use and location in the facility. Scenarios such as the following can be foreseen: Fires and explosions Chemical spills Hazardous material spills After planned or unplanned equipment shutdowns Nonroutine tasks, such as rarely performed maintenance activities Structural breakdownS Disease emergencies Weather emergencies and natural disasters Work-related violence Action point 6: Characterize the nature of identified hazards, identify temporary control measures and prioritize the dangers of control The next step is to assess and understand the identified hazards and the types of events that may occur as a result of workers' exposure to these hazards. This information can be used to develop temporary controls and to prioritize the dangers of permanent control. How to achieve it Evaluate each hazard by considering the severity of potential outcomes, the likelihood that an event or exposure will occur, and the number of workers who may be exposed. Use temporary control measures to protect workers until more permanent solutions can be implemented. Prioritise the hazards so that those who pose the greatest risk risk, First. Please note, however, that employers have an ongoing obligation to control all serious recognised hazards and to protect workers. Note: Risk is a product of hazard and exposure. The risk can thus be reduced by controlling or eliminating the hazard or by reducing workers' exposure to hazards. A risk assessment helps employers understand the dangers of their own workplace and prioritise hazards for permanent control. Control.