

Management Review

Owner/Senior Management is ultimately responsible for assuring that the HSMS is effective. Owner/Senior Management focuses on the overall system and not specific details as these should be looked after by the system itself. On a quarterly, semi-annual or annual basis, senior management should conduct a formal review of the program to determine if the HSMS is meeting the goals and objectives of health and safety in the workplace. Management reviews include information from a variety of sources, such as:

- HSMS audits and reviews
- worker input
- investigation / inspection results
- interview / survey results
- JHSC/Rep documents
- other information that may be of benefit.

The results of the review can be compared to the previous year's performance, and used as a basis for making decisions for improvements to the HSMS. For each element a determination will be made for:

- whether they are implemented and monitored
- preventive actions are implemented in a timely manner
- corrective actions are completed in a timely manner
- effectiveness
- conformity to the standards of the proposed Accreditation Program
- records of changes and updates to the system tracking continual improvement
- changes in legislation, staff, process, organizational structure, equipment and to determine what impact it has on the HSMS, and if the impact has been incorporated into changes in the HSMS
- internal audits, records, external audits, feedback from all workplace parties and any suggestions for improvement.

Owner/Senior Management formulates an action plan to implement any identified necessary improvements to the HSMS. The action plan should include responsibilities, timelines for implementation and a follow-up process to ensure the action plan is implemented and effective.

The findings of the management review are recorded and formally communicated to the persons responsible for the HSMS, management, the JHSC/Rep and workplace parties. This is an opportunity for the employer to update employees on the success of the management system and any changes or improvements that have been made and to confirm achievement of goals and objectives.

Hazard Recognition

Hazard: A condition, practice or substance with the potential for causing loss, injury or harm to life, health or property.

Hazard recognition proactively identifies all hazards arising from an organization's activities. It should include routine and non-routine activities and situations.

All hazards must be identified even if they are well controlled. Hazards may be:

- **physical:** noise, vibration and temperature
- **chemical:** solids, liquids, vapours, gases, dusts, fumes or mists that if inhaled, ingested, injected or absorbed can cause harm
- **ergonomic:** work environments that do not meet the needs of the workers such as forced, fixed or awkward postures and repetition
- **biological:** living things or substances that, if they enter into the body, can cause illness such as bacteria, fungi, parasites, insects and mould
- **psychosocial:** organizational stressors such as work overload, violence, fast pace of work, and lack of autonomy
- **safety:** uncontrolled energy (e.g., electrical, mechanical), machine hazards, slips and falls, motor vehicles, and material handling.

Include all equipment, machinery, work areas, processes, jobs, occupations, work done by contractors. Include all shifts and work activities at different times of the day in hazard recognition and assessment procedures.

Once a hazard has been recognized, the extent and severity of the hazard must be assessed by comparing against standards and expectations. Where the law sets out a standard it must be followed. Other standards should be considered including workplace policies and procedures, Ministry of Labour Guidelines, Canadian Standards Association standards and guidelines and manufacturer's recommendations.

To recognize hazards procedures for the following must be in place:

Hazard Reporting

The standard should include:

- definition of a hazardous condition or act
- specification of when to report (time frames)
- explanation of how to report (form)
- identification of who should be notified (supervisor, JHSC, worker, health and safety representative)

- a rating system/process for the identified hazardous condition or act (e.g., major, moderate or minor hazard)
- assign responsibility for resolving the issues, timeframe and follow-up taken to ensure actions are completed
- requirement to conduct further investigation if hazard is not satisfactorily controlled.

First Aid Reporting and Procedures

In Ontario First Aid, reporting is a requirement under the WSIA, Regulation 1101 First Aid Requirements. Workers are required to tell the employer of any injury or the possible onset of a work-related disease/condition. Employers must make sure there is a record of first aid treatment/advice given to the worker.

Injury and Illness Reporting

The standard should include:

- a definition of injury and illness
- requirement for provision of immediate first aid treatment, emergency services, immediate transportation to needed medical treatment
- time frame for reporting (especially since both WSIA and OHSIA have specific requirements for legislative reporting of incidents)
- recording method and how it shall be done, such as a specific form
- who should receive the report
- follow-up
- management review.

Incident Investigation

The standard should include:

- definition of what will be investigated, such as fatalities, critical injuries, lost-time injuries, no lost-time injuries, occupational illnesses, property damage, unplanned fire, environmental incidents, unplanned exposures, near misses, etc.
- time line requirements for investigation
- identification of who is responsible for investigation
- reporting requirements for investigation reports
- root cause investigation and analysis
- system for including recommendations for corrective action, ensuring actions are taken
- notification requirements for internal and external: internal - appropriate management and joint health and safety committee/ health and safety representative as applicable; external - Ministry of Labour, Workplace Safety & Insurance Board, etc.

Workplace Inspections

Inspection program should include all levels of supervision. Inspections may be:

- senior management at intervals such as annual or semi-annual
- supervisor's inspection - both planned and unplanned
- worker inspection of work area and equipment - often done daily
- prior to use of equipment (pre-shift inspections, prior to use each day)
- JHSC inspection.

The standard should include:

- responsibilities assigned
- schedule established and areas identified for inspection
- identifies who will do inspections
- requires employee contacts and/or activity observations during inspections
- use of standard inspection reports, including area for recommendation to management and sign-off
- identifies rating system, (e.g., minor, moderate or major hazard)
- includes follow-up and posts / shares information from inspection
- JHSC inspection reports are reviewed by senior management; resolution process for unresolved issues.

Job/Task Analysis

Job/task analysis is a common method of hazard identification and risk assessment at the task level. The standard should include:

- requirement to identify and break down job tasks into steps
- identifying and recording existing or potential health and safety hazards within jobs, tasks, practices and/or work methods
- determining the best way to eliminate or control the task hazards; documented through:
 - listing the jobs, practices, or work methods
 - listing the steps of each job, practice or work method
 - listing the health or safety hazards for each step
 - rating each hazard for loss potential (e.g., potential to cause Musculoskeletal Disorder (MSD))
 - developing and implementing controls to prevent the health and safety hazards identified
 - reviewing method if the job changes or after a specified period of time.

Risk Assessment

Hazards are assessed by adding more detailed information to the information obtained from hazard recognition steps using People, Equipment, Materials, Environment and Processes (PEMEP).

To assess hazards the following steps should be followed:

- Identify or establish the appropriate standards that should be met including:
 - workplace policies, procedures and expectations
 - Ministry of Labour guidelines
 - legislation
 - Canadian Standards Association (CSA) standards and guidelines
 - Manufacturers' and suppliers' guidelines and recommendations.
- Complete appropriate workplace testing/analysis such as:
 - ergonomics
 - industrial hygiene (e.g., air quality)
 - noise
 - vibration.

An expert may be needed, especially where hygiene testing or ergonomics analysis is required.
- Review all relevant information such as:
 - fatality, injury or occupational illness risk factors that are prevalent in the business sector
 - hazard(s) reports, injury illness fatality reports, inspections, investigations, monitoring and measuring results and JHSC recommendations
 - job/task analysis results
 - consultation and input from workers
 - applicable information such as MOL guidelines, MSDSs and relevant CSA standards
 - other valuable information.
- Compare information collected during hazard recognition and assessment to appropriate standards identified above
- Document and report findings.

Once hazards are recognized and assessed, the level of risk can be determined.

For each hazard, consider how often a worker will be exposed to the identified hazard (frequency); the probability of harm to a worker if exposed to the hazard (likelihood); and, the potential level of harm to the worker if exposed to the hazard (severity).

Risk = Frequency + Likelihood + Severity

Prioritize hazards based on a formal risk assessment.

Many organizations use a table to rank hazards. Those that score high will be ranked highest in priority for having appropriate controls implemented.

There are many hazard risk assessments available. An organization may use any currently available risk assessment system or develop its own system.

Control Activities

Once a hazard assessment is complete, the employer should be able to determine whether existing controls are adequate or need improvement. The employer ensures that for every risk identified, appropriate controls are developed.

There are five control methods generally used:

- 1. Engineering controls:** designed into the workplace, equipment or processes and include:
 - **substitution:** replacing a hazardous substance or material with one that performs the same function but creates less hazard or a more easily controlled hazard
 - **redesign of the workplace or work processes:** equipment, purchasing new equipment or redesigning work processes to minimize workers' exposure to a hazard
 - **ventilation:** using either general ventilation or local exhaust
 - **isolation:** enclosing equipment or processes to isolate the hazard from workers, such as placing noisy equipment in a separate room or enclosing a chemical process
 - **shielding:** putting barriers between the worker and the hazard, such as welding curtains or sound baffles.
- 2. Hygiene and facilities:** good personal hygiene practices reduce the chance of toxic substances being absorbed, ingested, inhaled or injected into the body. They may also prevent carrying hazardous agents outside the workplace. Eating, drinking and smoking should take place only in designated areas that are separated from contaminated areas. Hygiene practices work best when workers are given appropriate training and adequate time and facilities for changing clothes and washing or showering.
- 3. Work practices:** examples of work practices include:
 - standard work procedures and safe practices
 - housekeeping procedures
 - equipment maintenance.
- 4. Administrative controls:** involve changing the way people work with a hazard rather than directly controlling the hazard itself (e.g., job rotation, scheduling dangerous work when fewer people are in the workplace).
- 5. Personal protective equipment:**
 - eye and face protection
 - head protection
 - foot protection
 - hand protection
 - respirators
 - hearing protection
 - fall protection

- body protection.

In the workplace controls can be applied at three points:

- **At the source:** redesigning the equipment or process can eliminate the hazard such as:
 - substitution of a hazardous chemical with one that is not hazardous but still achieves the same purpose
 - changes in machinery design to eliminate noise and vibration at the manufacturing stage.
- **Along the path:** control along the path between the source of the hazard and the worker such as:
 - physical guards to prevent access to the hazard
 - engineering controls such as ventilation to help remove exposure to the hazard
 - sound muffling hoods over noisy equipment.
- **At the worker:** If hazards cannot be controlled at the source or along the path then the last resort is to control them at the worker using methods such as:
 - administrative controls
 - personal protective equipment.

Workers and managers who are exposed to the hazard should provide input into the development of the control measure as they have job knowledge and will be the ones who will work with the control. Any control procedures developed should be evaluated to ensure that it in itself does not introduce new hazards.

All workers should be adequately trained in the procedures and training documented. The written standard shall include a process for regular review of the controls and safe work procedures to ensure that controls are still adequate to protect workers. Controls should be evaluated to ensure that they comply with regulation. Any non-compliance with controls, noted during workplace inspections and injury investigations, will be referred to an appropriate management representative for correction. Changes should be made to the controls to remedy any deficiencies noted.