



MSD Prevention Guideline for Ontario

Workplace solutions for back pain, tennis elbow and other musculoskeletal disorders (MSD), because work shouldn't hurt.

Comprehensive Guideline

Is this the right version of the Guideline for your organization?

This COMPREHENSIVE version of the guideline is intended for medium to large companies with an existing Health and Safety Management program who wish to improve their management approach to prevent MSD at the organizational level. This COMPREHENSIVE version is one part of the MSD Prevention Guideline.

The three versions of the Guideline use similar structure and language, so organizations may use any of the versions without having to change their approach if they wish to use another version.

For more info visit:
msdprevention.com

© 2018 CRE-MSD. CRE-MSD receives funding through a grant provided by the Ontario Ministry of Labour. The views expressed are those of the authors and do not necessarily reflect those of the Province.



Centre of Research
Expertise for the
Prevention of
Musculoskeletal Disorders

**Work
shouldn't
hurt**

MSD Prevention Guideline for Ontario

Workplace solutions for back pain, tennis elbow and other musculoskeletal disorders (MSD), because work shouldn't hurt.

The MSD Prevention Guideline for Ontario includes three types of MSD Prevention:

1. A Quick Start Guide for small and micro business
2. A Basic Guideline for medium to larger organizations
3. A Comprehensive Guideline for large organizations

All can be accessed through the dedicated website: www.msdpreservation.com

The website includes information:

- About MSD
- Prevention of MSD (where this information can be found)
- Reported MSD
- Information targeted at specific workplace stakeholders,
- Risk assessment and controls
- Resources

Acknowledgements

The development of a New MSD Prevention Guideline for Ontario was a multi-stakeholder initiative led by the Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD) in consultation with representatives from the Ontario Health and Safety System, Ontario's labour organizations, employer associations, and individual employers and workers. Their important contributions are gratefully acknowledged. The first edition of the Musculoskeletal Disorder (MSD) Prevention Guideline for Ontario is similarly acknowledged for providing materials that have been reused and modified in this Guideline.

Disclaimer

CRE-MSD and this Guideline received funding through a grant provided by the Ontario Ministry of Labour. The views expressed are those of the authors and do not necessarily reflect those of the Province of Ontario

The MSD Prevention Guideline for Ontario Roadmap to Success

 <p>STEP 1</p>	<p>Demonstrate Management Commitment and Leadership</p>	<p>Management should provide the leadership, vision, and resources (human and financial) needed to implement an effective MSD prevention program within the organization's overall Occupational Health and Safety (OHS) program. Strong leadership in health, safety, and MSD prevention must be demonstrated by business owners, executives, managers, and supervisors.</p>
 <p>STEP 2</p>	<p>Facilitate and Encourage Workers' Participation</p>	<p>Workers should play an active role in general health and safety, and MSD prevention in particular, by participating in training and awareness, recognizing hazards, planning and using controls for hazards including those related to MSD.</p>
 <p>STEP 3</p>	<p>Plan Hazard Identification and Risk Assessment</p>	<p>The organization should set up a process for recognizing jobs with MSD hazards, even if there is no injury or discomfort reported by workers. The organization needs to take advantage of information, that they may already collect, and review them to help recognize jobs that expose workers to MSD hazards.</p>
 <p>STEP 4</p>	<p>Conduct Hazard Identification and Risk Assessments</p>	<p>Hazards, including hazards related to MSD, need to be proactively identified and assessed through a collaborative process.</p> <p><i>This element completes the first two parts of the Recognize, Assess, Control and Evaluate (RACE) cycle.</i></p>
 <p>STEP 5</p>	<p>Develop a Set of Targets and Goals to Eliminate Hazards & Control Risks</p>	<p>A set of targets and goals to eliminate MSD hazards and control exposure to hazards should be developed. These targets and goals need to be measurable and appropriate to the organization's needs.</p>
 <p>STEP 6</p>	<p>Control Hazards and Implement Necessary Changes to Achieve Goals and Targets</p>	<p>The organization should implement necessary changes as outlined in Step 4. All the hazard identification, risk assessment and planning are for nothing if the necessary changes are not made. Regardless of the type of control action to be taken The management is responsible to ensure effective and timely implementation of control actions.</p> <p><i>This element completes the third part of the Recognize, Assess, Control and Evaluate (RACE) cycle.</i></p>
 <p>STEP 7</p>	<p>Provide Education and Training</p>	<p>MSD related education and training should be provided to all managers, supervisors, and workers to ensure they have knowledge and skills necessary to work safely, demonstrate awareness and understanding of MSD hazards and how to identify, report, and control them</p>
 <p>STEP 8</p>	<p>Evaluate Controls</p>	<p>The effectiveness of controls actions should be evaluated.</p> <p><i>This element completes the fourth part of the Recognize, Assess, Control and Evaluate (RACE) cycle.</i></p>
 <p>STEP 9</p>	<p>Document Lessons Learned and Stakeholders' Feedback</p>	<p>The MSD prevention program should be evaluated to identify gaps and barriers and identify areas for improvement. The feedback from stakeholders and learning from success and failure stories will ultimately result in continued improvement of processes and approaches.</p>
 <p>STEP 10</p>	<p>Review Processes, Achievements, and Identify Areas for Improvement</p>	<p>Management should review the process and achievements at planned intervals and identify areas for improvement. This needs to be done by senior management. Management provides support for implementing measures to correct any deficiencies identified,</p>

Comprehensive Guideline: Step by Step

STEP 1: Demonstrate Management Commitment and Leadership

Management provides the leadership, vision, and resources needed to effectively prevent MSD, in addition to other Health and Safety hazards. Strong leadership in the prevention of MSD must be demonstrated by business owners, executives, managers, and supervisors.



Action 1.1: Be aware of and commit to comply with legal requirements

There are several legal requirements that organizations are required to comply with (i.e., [Occupational Health and Safety Act, Ontario](#)). The legal, and any other requirements, need to be incorporated into an OHS, and MSD prevention program.

How to do it?

The organization should take every action to comply with legal requirements. The organization should have a process in place to notify management of any deficiencies.

The organization needs to ensure the compliance with legal requirements is embedded into all steps as outlined in this guideline and identify any deficiencies.

Management needs to be aware of the relevant legal requirements and commit to comply with these requirements in the policy (Action 1.2).

Action 1.2: Write MSD prevention policy

The first action by management is to communicate organization's strategy and commitment towards OHS in general and prevention of MSD in particular. The policy statement demonstrates the organization's commitment to position the importance of MSD prevention as an important aspect of the organization's strategy to safeguard the health, safety and wellbeing of workers, improve productivity, performance, and product and service quality.



How to do it?

- Management should develop an OHS Policy that includes a commitment to prevent MSD and outlines a clear vision by the employer to improve OHS and prevent workplace injuries.
- Management should communicate the policy to all stakeholders including workers, contractors, subcontractors, visitors, and customers through posted material, orientation training, and any other job training means.
- Management should have a process in place to consider the policy in contractor and vendor selection, purchasing, workplace design and redesign.

Action 1.3: Assign roles and responsibilities

It is essential that relevant internal stakeholders play a role in OHS. Therefore, management needs to assign roles and responsibilities of internal stakeholders in OHS and MSD prevention. Management defines and communicates who is responsible for implementing and maintaining the OHS program that includes prevention of MSD. Management holds people accountable for their performance in preventing MSD.

How to do it?

- Management should define overall roles and responsibilities of main stakeholders. This needs to be written and communicated to all employees.
- Management may assign and authorize the Joint Health and Safety Committee (JHSC) or a similar Health and Safety committee (HSC) to implement the MSD prevention program.
- Management in consultation with JHSC or similar HSC identifies person or persons with authority to champion the implementation of the program. In smaller organizations this person must be the top management.
- In larger businesses with more than one JHSC, a Master (steering) JHSC may oversee the MSD prevention activities.

Action 1.4: Allocate required resources

The successful implementation of any prevention program requires adequate human and financial resources to help the organization achieve its MSD prevention goals and objectives. Management allocates the necessary human and financial resources to operate and maintain the OHS program, including MSD prevention. It also allocates resources to fix any deficiencies in the program.



How to do it?

- Management in consultation with the JHSC or similar HSC should estimate the resources needed to establish and implement the program.
- Management should provide necessary resources (which includes people, money and training) to operate and maintain the OHS program, including MSD prevention.
- Management should allocate sufficient resources (which includes people, money and training) to achieve the organization's targets and objectives identified in Step 5 and correct any deficiencies found.
- Management in collaboration with JHSC or similar HSC integrate OHS into planning and budgeting processes and align budgets with program needs.
- Supervisors and managers should allow time in workers' schedules for full participation in the program.
- Management in collaboration with JHSC or similar HSC should provide direct resources (money and staff time) to operate and maintain the program, meet OHS commitments, and pursue program goals.
- The organization should make appropriate arrangements to ensure that resources such as first-aid and medical treatment are available if a worker is injured at work or suffers a work-related illness.

STEP 2: Facilitate and Encourage Workers' Participation

Workers should play an active role in OHS in general, and MSD prevention in particular, by participating in designing the workplace and workstations, training and awareness, recognizing hazards, planning control actions, and using controls to eliminate hazards or reducing exposures to hazards including those related to MSD.



Action 2.1: Workers' Participation

Workers' participation in multiple aspects of the OHS and MSD prevention program is an essential component of effective prevention activities. Worker participation needs to be incorporated throughout the OHS program design and implementation including prevention of MSD. Workers should have access to the information they need to participate effectively in the prevention of MSD. Workers are encouraged to participate in any OHS related activities and the organization should ensure that workers feel comfortable and welcomed to share their concerns and suggestions.

How to do it?

- The organization should take advantage of workers' experience and knowledge to recognize and assess MSD hazards and to suggest effective solutions to eliminate them or reduce exposure to them.
- The organization should facilitate workers' participation by training them to recognize the symptoms of MSD and the work-related hazards that might contribute to the development of those symptoms.
- The organization should organize training sessions for workers to train them on the use of controls that have been implemented to reduce exposure to MSD hazards.
- The organization should involve workers in the identification of MSD hazards, reporting pain and discomfort, and planning and implementing changes to work tasks or jobs.
- Supervisors and managers should assure workers that their participation will only be used to improve their working conditions.
- Contractors, subcontractors, and temporary staffing agency workers should also participate in MSD prevention activities.

Action 2.2: Facilitate participation and remove barriers for participation

In order to ensure effective participation of workers in health, safety, and MSD prevention, the organization needs to facilitate workers' involvement. To achieve effective and meaningful participation of workers, the organization should ensure that workers inputs are well received. Some barriers may prevent active engagement of workers. These barriers may include language, skill levels, education, and fearing retaliation or discrimination for speaking up. The organization should remove these barriers to facilitate effective participation of workers.



How to do it?

- Supervisors and managers should facilitate worker participation and solicit worker input throughout all steps of the OHS program, including MSD prevention, and provide necessary time and resources for workers to participate.
 - Supervisors and managers should assure workers that their participation will only be used to improve their working conditions.
 - Supervisors and managers should provide necessary time for workers to be able to participate in prevention activities.
-

Action 2.3: Communication

Communication plays an important role in ensuring workers buy in and active engagement in MSD prevention. The organization should communicate with its workers about ongoing efforts to improve OHS and to prevent MSD. The ongoing communication should facilitate workers participation and encourage active involvement of all internal stakeholders in MSD prevention activities.

How to do it?

- Supervisors and managers should facilitate open discussion about OHS and hazards, including MSD, through toolbox talks or staff meetings. [The Quick Start Guideline](#) provides some examples for toolbox talks.
 - Supervisors and managers should provide necessary information to workers regarding the OHS program, including MSD Prevention, and other relevant issues. Some of the recommended material is provided in this guideline.
 - Management should protect and encourage workers right to know, right to participate, and right to refuse unsafe work related to MSD hazards by allowing their engagement in all aspects of the MSD prevention program.
-

STEP 3: Plan Hazard Identification and Risk Assessment

The organization should set up a process for recognizing jobs with MSD hazards, even if there is no injury or discomfort reported by workers. The organization needs to take advantage of information, that they may already collect, and review them to help recognize jobs that expose workers to MSD hazards.



Action 3.1: Establish a hazard identification and risk assessment process

The organization needs to establish an effective risk assessment process that allows systematic hazard identification and risk assessment for hazards including those related to MSD.

How to do it?

- The organization should develop, implement, document and maintain a risk assessment process that includes MSD hazards.
- The organization should develop a process to involve workers in reporting hazards, discomfort, and injuries including those related to MSD.
- All relevant internal stakeholders should be engaged in all aspect of the risk assessment process. The risk assessment process needs to be approved by both management and labour.
- The role of workers and workers' representative(s) needs to be included in the risk assessment process.

Action 3.2: Worker's reporting system

The organization should develop a process to record and encourage reporting of hazards including those related to MSD. By following up promptly on all reports, management can address issues before workers get injured, or develop MSD.

How to do it?

- The organization should develop a process to involve workers in reporting hazards, discomfort, and injuries including those related to MSD.
 - Supervisors and managers should encourage workers to report signs and symptoms of MSD, receive reports positively and follow up.
 - The organization should use workers' input and reports of pain, [discomfort](#), and fatigue to help identify high demand tasks or hazards.
 - Supervisors and managers, in collaboration with relevant stakeholders, review information with workers to identify potential MSD hazards.
-

Action 3.3: Creating a risk assessment team

Hazard identification and risk assessment is a collaborative effort and needs to be done in groups. The organization need to train internal stakeholders to participate in the risk assessment process. It is essential to have equal representation from management and labour in the risk assessment process.



How to do it?

- The organization should provide required training to those involved in the risk assessment on the specifics of the hazard identification, risk assessment process, tools and methods. Training should include hazards related to MSD.
 - The organization should invite key stakeholders (such as workers, supervisors, managers, maintenance personnel or engineers) to participate in hazard identification and risk assessment on a case by case basis. This is especially valuable for hazards related to MSD.
 - [Key stakeholders](#) should participate in hazard identification, including hazards related to MSD, through a process developed by the organization.
 - A workers' representative should participate in all activities related to hazard identification, risk assessment, and control.
-

Action 3.4: Choose risk assessment methods

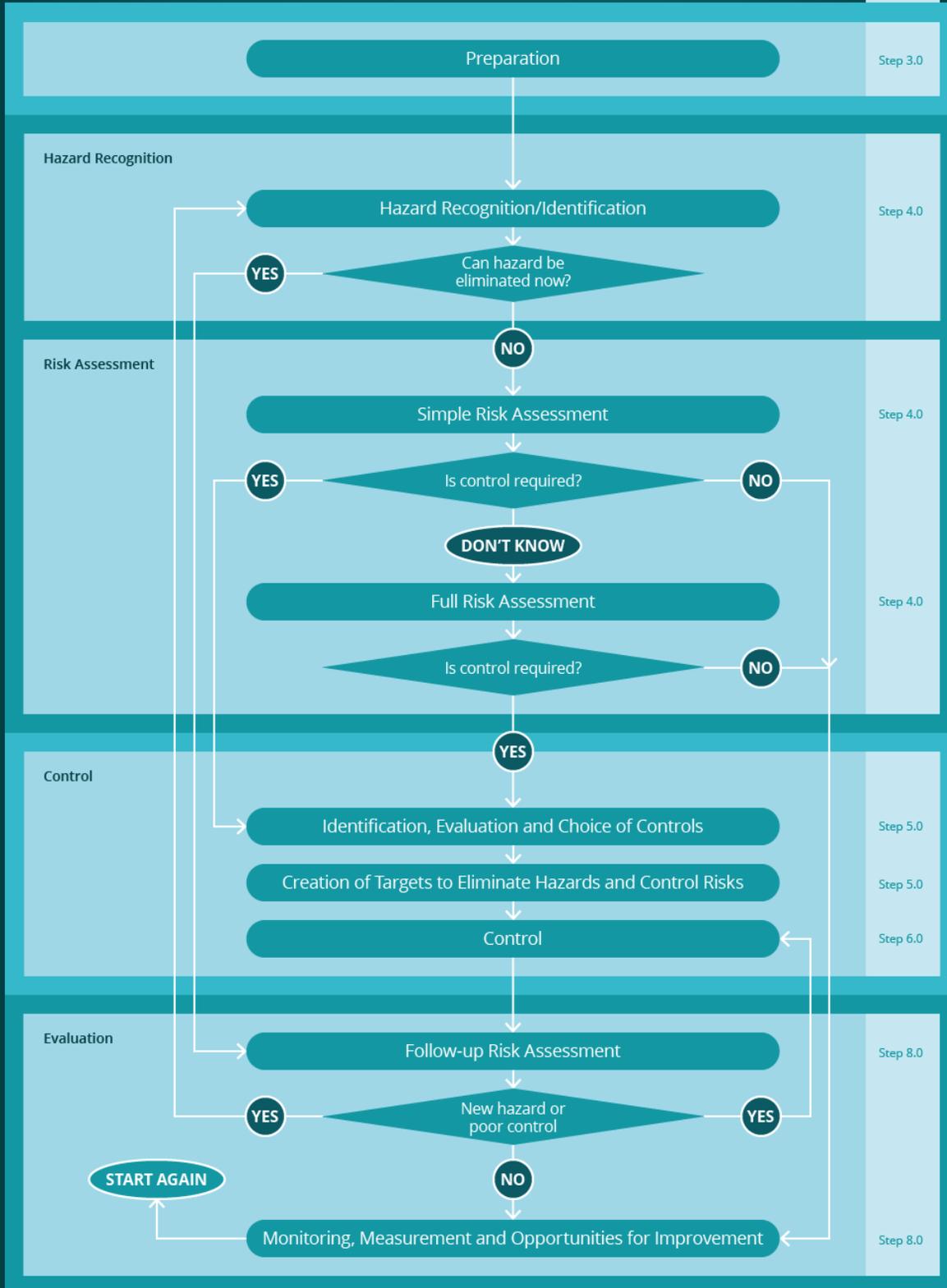
The organization should ensure to use appropriate method(s) for MSD hazard identification and risk assessment.

How to do it?

- The organization should [select](#) MSD hazard identification and risk assessment tools and checklists appropriate for the workplace. The [Tool Picker](#) on this website helps to select an appropriate tool. In addition, the [Resource Library](#) provides additional general tools to be used during hazard identification, risk assessment, and control.
 - The organization should develop procedures to assess jobs, including participation of workers, task analysis, [what to monitor, who to monitor, when to monitor and what data to collect](#), that is appropriate for the methods chosen including those related to MSD.
-

RACE: Recognition, Assessment, Control, and Evaluation

Guideline Step Links



Learn more about the RACE risk assessment method at msdprevention.com.

STEP 4: Conduct Hazard Identification and Risk Assessments

Hazards, including hazards related to MSD, need to be proactively identified and assessed through a collaborative process.



Action 4.1: Anticipate MSD hazards

The best and the most effective way to eliminate MSD hazards in the workplace is to anticipate and design out MSD hazards before workers work in new workplaces or re-designed spaces.

How to do it?

- The organization should have a process in place to anticipate MSD hazards before a work system is operational using, "[pre-start safety reviews](#)", procurement policies and design reviews during: initial planning, detailed design, installation, operation, maintenance, and decommissioning.
- All relevant stakeholders should actively participate in hazard anticipation by providing necessary information and engaging in hazard anticipation in all aspects of workplace design and re-design.

Action 4.2: Collect existing information to help Identify possible MSD hazards

Although it is essential to design out MSD hazards in the workplace, it may not be easy to do so. Therefore, the organization needs to use existing information to identify possible MSD hazards when workers are working. The organization may use existing data including lagging or passive surveillance data. This could include data related to reports of hazards, injuries and discomfort including MSD.

How to do it?

- The organization should analyze incidents and injuries, including those with reported MSD, to identify jobs or tasks with possible MSD hazards.
- The organization should have a process to review workers' compensation records and reports, including those related to MSD, (MSD lost time injuries and no-lost injuries) to identify jobs or tasks with possible MSD hazards. This is called passive surveillance of injuries, hazards and reports (not surveillance of workers).

Action 4.3: Collect workers' input on hazards

The organization should have a process to collect workers' input on specific hazards in their workspace and receive their inputs.

How to do it?

- The organization should use [workers input](#), [reports of pain and discomfort](#), and [fatigue](#) to help [identify high demand tasks or MSD hazards](#).
- The organization should collect and review workers' concerns, types and number of MSD reports of the job or task, concerns related to absenteeism and/or production, and the findings from the MSD hazard identification tool(s). An example of an MSD hazard identification tool can be found [here](#).



Action 4.4: Put in place procedures to collect new information to help Identify possible MSD hazards

The organization should collect new data on exposure to MSD hazards. This should be done through active collaboration with workers. This is called active surveillance of injuries, hazards and reports (not surveillance of workers).

How to do it?

- The organization should use checklists during walkthrough inspections, [Job Safety Analysis](#) and ["Pre-Start Safety Reviews"](#) that include MSD hazards. These checklists may include [discomfort diagrams](#) and [perceived exertion survey](#) to help identify jobs or tasks with possible MSD hazards.

Action 4.5: Conduct screening, hazard assessment, root cause analysis, and risk analysis

The organization should go through a process to first screen for possible hazards, conduct root cause analysis for relevant MSD hazards and conduct a more in-depth risk analysis where necessary.



How to do it?

- The organization should collect information about hazards (Including MSD) using information from multiple sources (Active and Passive surveillance): hazard identification, risk assessment (as needed), incident investigations, walkthrough inspections, workers reports, discomfort diagrams.
- The organization should use results of simple checklist, inspections, workers comments, discomfort diagrams and previous reports of pain and discomfort to [prioritize hazards for further analysis](#).
- For each of the agreed-upon MSD hazards, have the workers [brainstorm or discuss the root causes of the hazard](#). The organization should identify underlying root causes of MSD hazards by [5 WHY](#), [fish-bone diagrams](#), brainstorming or other methods. Look at all of the factors that could cause the hazard. These factors can be categorized as process, equipment, materials, environment and human. For additional resources visit the [Resource Library](#).
- If an MSD hazard is well agreed by management, workers, and a practicable control that can be put in place soon is available, proceed to control and do not proceed to risk analysis yet.
- If an MSD hazard cannot be eliminated, is not clearly identified or understood, or the root cause is unclear, move on to more in-depth [MSD risk analysis](#).
- If an MSD hazard is not clearly identified or understood and a root cause cannot be determined after performing the in-depth MSD risk analysis, consider asking for [help](#).

STEP 5: Develop a set of Targets and Goals to Eliminate Hazards & Control Risks

The next step in implementation of a successful OHS and MSD prevention program includes the development of a set of targets and goals to eliminate MSD hazards and control exposure to hazards. These targets and goals need to be measurable and appropriate to the needs of the organization.



Action 5.1: Identify and evaluate potential controls

The organization identifies control options to eliminate the hazard or implement control actions including those related to MSD, evaluate options for eliminating or controlling hazards being guided by the hierarchy of controls.

How to do it?

The organization should take the following actions:

- [Prioritize controlling](#) the root causes of hazards (including those related to MSD) that present the greater risk to workers (Note: employers have the obligation to control all recognized hazards).
 - Use brainstorming sessions with workers to identify solutions that eliminate the root causes of hazards (including those related to MSD) or mitigate their effects.
 - Use the internet, trade associations and other similar organizations to identify solutions that others have found effective in eliminating reducing or mitigating MSD related hazard.
-

Action 5.2: Selection of controls

The organization should have a process in selecting appropriate controls to address MSD hazards. These control actions then need to be prioritized as a set of targets and goals.

How to do it?

The organization should take the following actions to ensure the effectiveness of control actions in MSD prevention:

- Use the [Hierarchy of Controls](#) (engineering solutions over administrative controls or personal protective equipment) including those related to MSD.
- Prioritize workplace changes, such as hoists or carts in preference to less effective worker-focused solutions such as lift training or job rotation.
- If chosen, administrative changes for MSD such as lift training should be regarded as temporary or complimentary only until better solutions can be put in place.
- Identify short term and longer-term control strategies.
- Each workplace is unique: expect to have to adapt any purchased control (such as a roller conveyor) to your specific situation.
- Consider the effects of changes on other tasks in the work process.
- Consider performing a user trial (e.g., In a systematic way, have a range of potential users/workers use a mock-up of the change or get a tool on trial from a distributor.)
- Consider costs and work environment practicality, and barriers to changing the workplace when prioritizing controls including those related to MSD.
- After considering safety and MSD risk, consider favouring changes that increase product or service quality too.
- Identify any safety considerations or new hazards that are introduced by the controls including those related to MSD. Perform a [Job Safety Analysis](#) or a [general hazard identification](#) of the new work process after the controls are chosen.
- Identify hazards present during emergencies, including those related to MSD.
- Perform specific training on new job specific operational procedures or equipment as necessary for involved workers.
- Plan to make the change(s) selected above, document those responsible and a timeline.



Action 5.3: Identifying training and education needs

The organization should identify training and education needs for successful prevention of MSD.



How to do it?

- The training needs assessment should be done for all relevant stakeholders. The needs assessment is based on the information collected during hazard identification and risk assessment process and focuses on increasing awareness on how to eliminate or reduce exposure to MSD hazards. The stakeholders may include but not limited to workers and workers' representatives, supervisors, owner/managers, engineers, maintenance, quality, operations, logistics, facility managers, contractors, subcontractors, temporary agency worker etc.
-

Action 5.4: Develop targets and goals

The organization should develop a list of targets and goals to effectively manage the change management process. The list of prioritized action items with the specific timeline and assigned roles and responsibility will result in a more efficient and systematic process.

How to do it?

- The organization should develop a set of targets and goals to improve health, safety and prevent workplace injuries with workers including those related to MSD.
 - The organization should develop a timeline and action plan to control the identified hazards including those related to MSD.
 - The targets and goals should be measurable and specific.
-

STEP 6: Control Hazards and Implement Necessary Changes to Achieve Targets and Goals

Regardless of the type of control action to be taken, the organization should implement necessary changes as outlined in Step 4.5. The management is responsible to ensure effective and timely implementation of control actions.



Action 6.1: Implement control actions

The implementation of control actions is a collaborative effort and the organization should involve appropriate stakeholders when necessary.

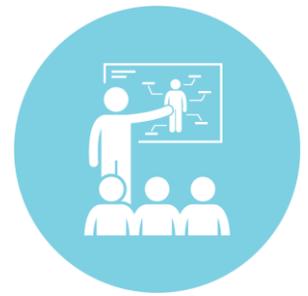
How to do it?

- The organization should implement control actions and necessary changes to achieve goals and targets outlined in Step 4.5.
- The organization should monitor the progress towards implementation of control actions and inform management about any potential barriers.
- The organization should perform specific training for workers/users who will be affected by the change.
- The supervisor, manager, or worker representative should inform potentially affected workers the introduction of the change before putting in place controls for multiple areas or workspaces (use it in a limited way e.g., a single workspace).
- The organization should make the change, but expect a breaking in period (e.g., not being able to work at the normal pace initially).
- All stakeholders should expect to modify the control in the short term.
- The organization should be alerted to possible unexpected effects on other tasks or processes (e.g., tasks upstream or downstream in the work process)

Note: If the changes are not working, even in the short term after modification, go back to Step 4.

STEP 7: Provide Education and Training

The MSD related education and training should be provided to all managers, supervisors, and workers to ensure they have knowledge and skills needed to work safely, demonstrate awareness and understanding of MSD hazards and how to identify, report, and control them. All stakeholders should receive specialized training when their work involves unique hazards or when they are assigned specific roles in managing or operating the safety and health program, including the MSD prevention program. The organization should identify training needs on an ongoing basis.



Action 7.1: Deliver training

The organization should deliver training based on required training for the implementation of MSD prevention activities as outlined in Step 5.

How to do it?

The organization should have a process in place to:

- Consult with workers to identify safe work practices including those related to MSD.
- Provide specific education and training regarding MSD issues, hazards and controls.
- Provide specific training to the members of risk assessment team regarding MSD hazards and associated risk.
- Provide necessary training to all part-time and full-time managers, supervisors, workers, contractors, subcontractors, temporary agency workers including those related to MSD according to their needs identified in Step 5.
- Train all stakeholders on the proper use of control actions implemented including those related to MSD.
- Train all stakeholders on their roles and responsibilities in all aspects of the program including injury reporting and hazard identification.

Note 1: The preferred method of training is face-to-face, one-on-one, and job specific training.

Note 2: Training is provided by a competent person.

STEP 8: Evaluate Controls, the Program and the Organization's Performance

Similar to any other programs, it is important to evaluate the effectiveness of control actions, the MSD prevention program, and the organization's performance. This information provides a comprehensive insight into organization's road to success.



Action 8.1: Follow-up/evaluate the implemented controls

Follow-up and evaluation are essential to ensure the effectiveness of control actions and the decision-making process. The organization should track progress in implementing the controls and inspect the controls once they are installed. The organization should also follow-up with relevant stakeholders to evaluate if the new controls are effective during implementation of the changes shortly after their implementation and determine whether additional or different controls may be more effective.

How to do it?

- Management or supervisors should follow-up with relevant stakeholders during and shortly after the changes are made, for immediate feedback on hazard elimination, mitigation or to identify other concerns.
- The organization should ensure that control actions have been implemented as planned and used correctly and consistently, including those related to MSD.
- The organization should give changes a fair trial by allowing workers to learn and become proficient with the changes before checking on the control's success.
- The organization should use checklists and multiple workers' feedback to check whether the changes have removed the original hazards and improved the work or if the changes have introduced new hazards.
- The organization should be prepared to try a few fixes to find the right one for workers and the workplace.
- If the changes are not working: Go back to Step 5 (if an appropriate one was not chosen) or Go back to step 3 (if the root cause of hazard was not identified or understood).

Note: Consider asking for [help](#) if either the problem or solution are unclear.

Action 8.2: Ongoing follow-up of controls

The organization should conduct regular follow-up evaluations to ensure that all control actions have been implemented as planned, are used correctly and consistently, and are continuing to eliminate or mitigate the hazards, including those related to MSD, as planned.



How to do it?

- The organization should conduct regular follow-up evaluations to ensure that all control actions been implemented as planned and used correctly and consistently and are continuing to eliminate or mitigate the hazards (including those related to MSD) as planned.
- The supervisor should use checklists and multiple workers' feedback sessions to check whether the changes have removed the original hazards and improved the work.
- The organization should check if the changes have introduced new hazards: either related to MSD or other safety issues. The organization's HSC should track implementation against targets and goals.
- The organization should communicate the progress on control actions to all relevant stakeholders including workers.

Note: Be prepared to try a few fixes to find the right one for workers and the workplace.

Action 8.3: Check achievement of organizational goals

It is important for management to ensure achievement of organizational targets and goals. Therefore, the organization should put in place a systematic approach for evaluating the organization's performance with respect to its targets and goals identified in Step 5.

How to do it?

The organization should have a process to:

- Monitor the progress towards achieving targets and goals identified in Step 5.
 - Keep workers well-informed and provide progress updates including those related to MSD.
 - Determine required resources and identify opportunities to improve the OHS program including MSD prevention issues.
 - Consult with workers on program performance and possible improvement strategies.
 - Evaluate the effectiveness of the training program to ensure that workers understand the control actions, including those related to MSD.
-

STEP 9: Document Lessons Learned and Stakeholders' Feedback

The organization should review its MSD prevention program to identify gaps and barriers and identify areas for improvement. The feedback from stakeholders and learning from success and failure stories will ultimately result in continued improvement of processes and approaches.



Action 9.1: Review program

The organization should review its MSD prevention program to identify gaps and barriers and areas for improvement.

How to do it?

The organization should have a process to:

- Review workers' participation in the program and recommended solutions to remove barriers for participation.
 - Develop a process to receive periodic feedback from stakeholders with respect to organization's performance in improving work conditions, including MSD prevention.
 - Review information gathered.
 - Document and communicate evaluation results and lessons learned (including those related to MSD and inform top management).
 - Provide periodic comprehensive report to inform top management about organization's performance in addressing OHS concerns including those related to MSD.
-

STEP 10: Review Processes, Achievements, and Identify Areas for Improvement

The organization should review its MSD prevention program in planned intervals to identify areas for improvement. This needs to be done by senior management.



Action 10.1: Management review and continuous improvement

The program's successes and failures should be reviewed to guide management to identify areas for improvement and to continually improve organization's approach towards OHS and MSD prevention.

How to do it?

Management in consultation with other relevant stakeholders should:

- Revisit targets, goals, and training needs, including those related to MSD, in planned intervals (i.e., every year).
 - Discuss areas for improvement with all stakeholders, including MSD prevention.
 - Take necessary actions to ensure continuous improvement in improving OHS and prevention of workplace injuries including those related to MSD.
 - Conduct ongoing reviews and evaluation of the control actions, program and organization's OHS and MSD prevention performance.
 - Order relevant stakeholder(s) to implement measures to correct any deficiencies identified.
 - Update policy, procedures and use in future planning.
-

Guideline Development Process

The first Musculoskeletal Disorder (MSD) Prevention Guideline for Ontario was developed in partnership with the members of the Occupational Health and Safety Council of Ontario (OHSCO) and published in 2007. In 2016, CRE-MSD was tasked with updating the Guideline. This included evaluating the original Guideline, determining workplaces' needs for prevention and synthesizing best practices with respect to MSD prevention. Further, CRE-MSD was tasked with developing new content and testing content with selected workplaces. Lastly CRE-MSD was tasked with developing a stand-alone website.

CRE-MSD initiated a collaborative process that included workers and workers' representatives; employers and employers' representatives; the Ontario Health and Safety System; sectoral, industrial and business associations; the Ontario Ministry of Labour; ergonomists and health and safety consultants.

The consultation process included workshops; presentations to and feedback from multiple meetings and conferences; an environmental scan; original reviews of the literature (published in the peer reviewed literature); interviews with key informants and a web survey. Original research on the prevention of MSD in micro and small businesses was also performed and published.

Based upon this information gathering, the following major priorities were identified:

1. Target micro and small businesses with materials to match the structure of these organizations
2. Include processes for implementing MSD prevention programs and activities that fit business processes
3. Participation of workers is especially important for MSD prevention
4. Make it easy for a wide range of individuals and organizations to access relevant information
5. Make resources available in downloadable and modifiable formats

Scope of the Guideline

The Guideline's primary purpose is to provide Ontario's employers and workers with information and advice on a framework for preventing musculoskeletal disorders in the workplace.

Use of the Guideline

The MSD prevention approach presented in this guideline is consistent with better practices and is based on best current information and experience. The framework presents one way of addressing MSDs in a workplace. Other MSD prevention processes and programs may be equally effective. The information in the MSD Prevention Guideline for Ontario and its related documents is generic and not targeted at any specific type of workplace, industry sector or work task. Although the specific hazards in jobs or tasks present in different workplaces vary, the underlying basic hazards related to MSD are the same for all workplaces.

The primary audience for the MSD Prevention Guideline for Ontario and the related materials are workplace parties including employers, managers, supervisors, workers, joint health and safety committee (JHSC) members, health and safety representatives (H&S reps) and workplace union representatives. Unions, employer associations, health and safety professionals, health and safety associations, ergonomists, and others may also find the information of use.

The material contained on this website is for information and reference purposes only and not intended as legal or professional advice. The adoption and/or use of the tools, information, and/or practices may not meet the needs, requirements or obligations of individuals or workplaces.

Specifically, the MSD Prevention Guideline for Ontario and its related materials:

- Do not cover all of the legislated workplace health and safety requirements
- Do not specifically apply to Early and Safe Return-to-Work programs
- Do not address clinical issues of injury and treatment
- Do not address issues related to personal wellness, fitness, diet or lifestyle
- Do not describe the full scope of ergonomics as applied to the workplace

The guidance in this website does not, in any way, limit or reduce the obligations that workplace parties have under the Ontario Occupational Health and Safety Act (R.S.O. 1990, Chapter O.1), or any of its regulations. Musculoskeletal Disorder (MSD) hazards that are present in the workplace must be recognized and precautions put in place to fulfill requirements under the OHSA.

Acknowledgements

The development of a New MSD Prevention Guideline for Ontario was a multi-stakeholder initiative led by the Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD) in consultation with representatives from the Ontario Health and Safety System, Ontario's labour organizations, employer associations, and individual employers and workers. Their important contributions are gratefully acknowledged. The first edition of the Musculoskeletal Disorder (MSD) Prevention Guideline for Ontario is similarly acknowledged for providing materials that have been reused and modified in this Guideline.

Disclaimer

CRE-MSD and this Guideline received funding through a grant provided by the Ontario Ministry of Labour. The views expressed are those of the authors and do not necessarily reflect those of the Province of Ontario
