

Basic Guideline

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

This **BASIC** version of the Guideline is intended for medium to large companies with an existing Health and Safety program who wish to improve their problem-solving approach to prevent MSD. This **BASIC** 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.





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.msdprevention.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

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The MSD Prevention Guideline for Ontario Roadmap to Success

STEP 1	Demonstrate Management Commitment and Leadership	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.
STEP 2	Facilitate and Encourage Workers' Participation	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.
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.
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. This element completes the first two parts of the Recognize, Assess, Control and Evaluate (RACE) cycle.
STEP 5	Develop a Set of Targets and Goals to Eliminate Hazards & Control Risks	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.
STEP 6	Control Hazards and Implement Necessary Changes to Achieve Goals and Targets	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. This element completes the third part of the Recognize, Assess, Control and Evaluate (RACE) cycle.
STEP 7	Provide Education and Training	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
STEP 8	Evaluate Controls	The effectiveness of controls actions should be evaluated. This element completes the fourth part of the Recognize, Assess, Control and Evaluate (RACE) cycle.
STEP 9	Document Lessons Learned and Stakeholders' Feedback	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.
STEP 10	Review Processes, Achievements, and Identify Areas for Improvement	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,





Basic 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: Comply with legal requirements

Organizations are required to comply with many legal and other requirements concerning OHS (In Ontario, <u>Occupational Health and Safety Act, Ontario</u>). They need to be incorporated into an organization's OHS, and MSD prevention program.

Note: Employers have a legal responsibility to provide a safe workplace. This includes improving the workplace and implementing measures to protect workers from all hazards, including those related to musculoskeletal disorders.

- Management needs to be aware of all relevant Health and Safety Legislation and Regulation relevant to their organization.
- Management needs to incorporate legal and other requirements into the policy (Action 1.2).



Action 1.2: MSD prevention policy

The first action by management is to communicate organization's strategy and commitment towards health and safety in general and prevention of MSD in particular. The policy statement demonstrates organization's commitment to position the importance of MSD prevention as an important aspect



How to do it?

- Management should develop an OHS policy that includes a commitment to prevent MSD, or add MSD to existing OHS policy documents.
- The policy should state the organization's strategy to safeguard the health, safety and wellbeing of workers (including MSD), improve productivity, performance, and product and service quality.
- Management should communicate the policy to all stakeholders.

Action 1.3: Assign roles and responsibilities and provide resources

The successful implementation of any prevention program requires adequate human and financial resources to help the organization achieve its OH&S and MSD prevention goals and objectives.

- Management should define overall roles and responsibilities.
- Management may assign and authorize 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 organization this person must be the top management.
- Management should allocate and provide necessary resources (which
 includes people, money and training) for the implementation and
 maintenance of the OHS program, including MSD prevention.





STEP 2: Facilitate and Encourage Workers' Participation

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.



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. 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 enable 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 identifying MSD hazards, reporting pain and discomfort, and planning and implementing changes to work tasks or jobs.

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 aid workers' involvement. Barriers to participation may include language, skill levels, education, and fearing retaliation or discrimination for speaking up. The organization should remove these barriers.

- 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

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.

- Supervisors and managers should facilitate open discussion about OHS and hazards, including MSD, through safety or toolbox talks or staff meetings. The <u>Quick Start Guideline</u> provides some resources 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 it to help recognize jobs that expose workers to MSD hazards.



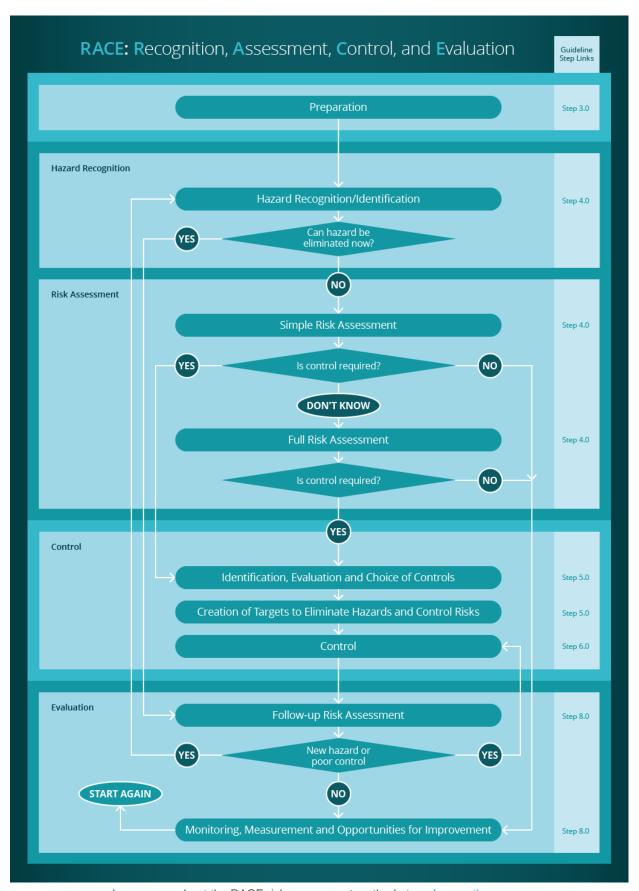
Action 3.1: Establish a risk assessment process and assessment method(s)

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. Hazard identification and risk assessment is a collaborative effort and it needs to be done in groups. The organization needs 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. The organization should ensure to use appropriate method(s) for MSD hazard identification and risk assessment.

- The organization should develop, implement, document and maintain a risk assessment process that includes MSD hazards. The risk assessment process needs to be approved by both management and labour.
- The organization should develop a process to involve workers in reporting hazards, discomfort, and injuries including those related to MSD.
- The role of workers and workers' representative(s) needs to be included in the risk assessment process. A workers' representative should participate in all activities related to hazard identification, risk assessment, and control.
- The organization should <u>select</u> MSD hazard identification and risk assessment tools and checklists appropriate for the workplace. The MSD <u>Tool Picker</u> in this website helps to select an appropriate tool. In addition, the <u>Resource Library</u> provides additional general tools to be used during MSD 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.







Learn more about the RACE risk assessment method at $\underline{\mathsf{msdprevention.com}}$.





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 and identify MSD hazards using existing information

The best and the most effective way to eliminate MSD hazard in the workplace is to anticipate and design out MSD hazards. 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 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.
- 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 4.2: Collect workers' input on hazards and new information to identify possible MSD hazards

The organization should have a process to collect worker's input on exposure to MSD hazards. The organization also needs to collect new data through active collaboration with workers.

- 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 worker concerns, type 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 4.3: Conduct a basic screening, 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 analysis where necessary.

- The organization should collect information about hazards (including MSD) using information from multiple sources (Active and Passive surveillance): hazard identification, 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, brainstorm or discuss the root causes of the hazard. The organization should identify underlying root causes of MSD hazards by <u>5 WHY</u>, fish-bone diagrams, brainstorming or other methods. Look at all of the factors that could create 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 in-depth 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 indepth analysis and MSD risk assessment.
- 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 organization's needs.



Action 5.1: Selection of controls

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

- 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 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.
- 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. A checklist of challenges to implementation of controls is available here.
- 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.
- 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.
- The organization should identify training and education needs for successful prevention of MSD.





Action 5.2: Develop targets and goals

The organization should develop a list of targets and goals to effectively manage the change management process.

- 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: Implement Necessary Changes

Regardless of the type of control action to be taken, the organization should implement necessary changes as outlined in Step 4.3. 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.

- The organization should implement control actions and necessary changes to achieve goals and targets outlined in Step 4.
- 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).
- **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 necessary 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.

- Provide specific education and training regarding MSD issues, hazards and controls.
- Provide necessary training to all part-time and full-time mangers, supervisors, workers, contractors, subcontractors, temporary agency workers including those related to MSD according their needs identified in Step 5.
- Train all stakeholders on the proper use of control actions implemented including those related to MSD.
- Consult with workers to identify safe work practices 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 should be 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 controls. 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. 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.

- 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 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 to back to Step 5 (if an appropriate target was not chosen) or Go back to Step 3 (if the root cause of hazard was not identified or understood).
- 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.
- 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.
- Note: Consider asking for help if either the problem or solution is unclear.





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: Identify gaps and barriers and areas for improvement

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

- Review workers participation in the program and recommend 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 reports 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 OHS and MSD prevention program in planned intervals to identify areas for improvement. This should 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 continually improving organizational approach towards OHS and MSD prevention.

- 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.
- 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 standalone 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:

- Target micro and small businesses with materials to match the structure of these organizations
- Include processes for implementing MSD prevention programs and activities that fit business processes
- **3.** Participation of workers is especially important for MSD prevention
- 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

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