



**REDUCING WORKPLACE
MUSCULOSKELETAL DISORDER RISKS**

Getting Started with the MSD Pledge

INTRODUCTION

For millions of Americans, work is a source of physical pain.

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Across industries, workers suffer injuries at staggering rates—from the repetitive movements, awkward postures and forceful exertions required to get their jobs done. These injuries are known as musculoskeletal disorders (MSDs). They are the largest category of workplace injuries in the United States, and they cost employers billions of dollars each year in workers' compensation, disability, absenteeism and lost productivity.

Many of these injuries emerge after days, weeks, months or even years of work-related activity. By the time an injury occurs, it's almost certain a workplace has missed several warning signals and the opportunity to have prevented it in the first place. Workers themselves might not even be aware of the risk factors that are part of their routine tasks until they experience pain. Taking a comprehensive, proactive and scientific approach to addressing MSDs could prevent these injuries from occurring—and that would provide relief to millions of workers and return billions of dollars to organizations' bottom lines.

That's why employers across the country are taking action by signing the MSD Pledge, developed by the National Safety Council (NSC), and committing themselves to specific strategies with the goal of reducing MSD risk and subsequent injuries by 25% by 2025. Together, we can take steps to reduce workplace risks and help workers lead healthier, fuller lives, free of pain. And, through innovation and sharing of lessons learned, we can create safer, more productive workplaces for everyone.

While this is an ambitious goal, your dedication as an employer can make this a reality. At NSC, we're partnering with business leaders and renowned experts across America to create a future where work doesn't have to hurt, workers are engaged in safety solutions and businesses are even more productive.

Change is coming. And, for workers looking to avoid pain and live their fullest lives, not a moment too soon. We hope you'll join us.

Sincerely,

Lorraine Martin

PRESIDENT & CEO | NATIONAL SAFETY COUNCIL



The MSD Pledge was born out of the National Safety Council's MSD Solutions Lab – an initiative to prevent MSDs across a variety of industries by engaging key stakeholders, conducting research, inventing new technology and processes, and scaling the results. For more information, visit nsc.org/msd.

How to Use this Guide

This introductory guide is designed to help you identify and reduce risks for MSD injuries and build a safer workplace environment for workers. It is written for employers that are just starting to build their MSD Solutions Program, and for companies that want a refresher on key steps and actions they should take. Additional tools and resources are linked within this document and available at nsc.org/msd.

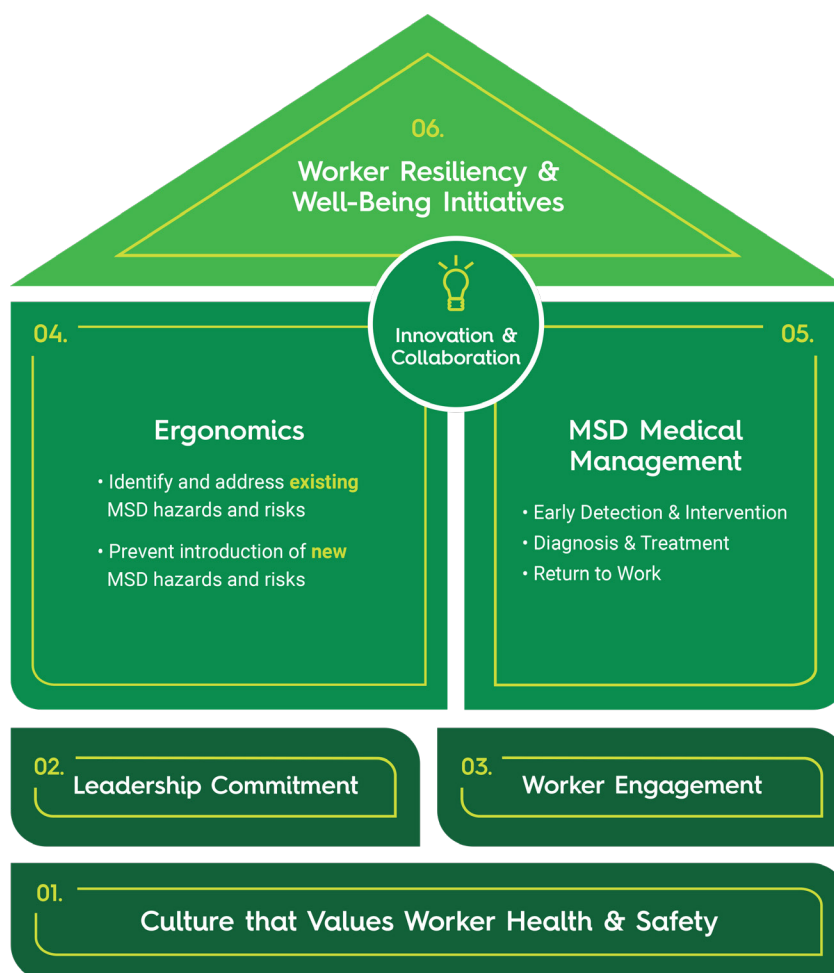
This Guide will help you:


Lay a strong foundation for success by:

- 01.** building a workplace culture that values worker health and safety
- 02.** mobilizing leadership within all levels of your organization and
- 03.** engaging workers directly to understand sources of risk and identify possible solutions.

Construct a comprehensive workplace MSD Solutions Program that:

- 04.** reduces risk through ergonomics,
- 05.** creates a medical management system for workers who experience MSD injuries and
- 06.** expands worker well-being initiatives that boost individual resilience.

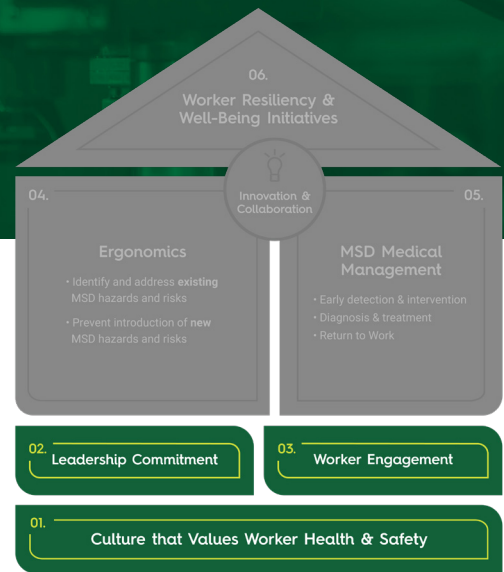


 **Innovate and collaborate** with other employers, safety professionals and experts through the MSD Pledge and encourage other companies to do the same. By sharing ideas and collaborating with other employers, your organization can accelerate the development of MSD solutions across all departments, benefiting from the shared expertise and ultimately helping to protect workers everywhere.

For more detailed information, including a range of free tools and resources to help you create or strengthen your MSD Solutions Program, visit us online at: nsc.org/msd.

PART I

Lay a Strong Foundation



Safe work environments begin and end with **company culture**. Everyone has a role to play in creating a culture that prioritizes safety. Company leaders can set a clear vision aligning the importance of safety with business success. Managers can lead by example, build trust and identify hazards. Frontline workers can be empowered to advocate for and use sound safety practices. If you need buy-in from company leaders, use our **MSD Pledge Resources** to make a business case to foster a safer work culture for your workplace. Consider how you can implement worker training on personal and professional impacts of MSD injuries to mobilize your workforce. Once you have buy-in, you'll need a champion or team to help create a participatory culture between workers, managers and leadership that reinforces health and safety.

STEP 1: Create a Culture that Values Worker Health & Safety

A company's most valuable investment is its people. Prioritizing worker safety over production quotas and productivity improves worker health and satisfaction, saves money in injury costs, and ultimately improves output in the long run. Companies that **implement additional rest breaks** and hire more workers for a production line reduce MSD injuries and achieve higher levels of output than simply increasing production quotas.

- Company goals such as productivity, employee retention, quality assurance and cost savings should be aligned with worker health and safety. Despite their good intentions, making injury metrics a key factor in bonuses or the bottom line can actually encourage under-reporting of injuries. The same even goes for a sign touting the “number of days since a workplace injury” — what worker wants to come forward at the risk of breaking their team's streak? Instead, define metrics of success that reward managers and workers for:
 - identifying risks and hazards;
 - designing innovative solutions;
 - participating in safety protocols; and
 - engaging in a culture of continuous improvement, including routine monitoring and reporting MSD symptoms.
- Safety messages should be central to routine communications, as well as embedded within regular policies and procedures. In training, team meetings and even daily huddles, managers should routinely discuss safety protocols, educate workers on MSD warning signs and make workers feel secure about speaking up when they are experiencing pain or facing workplace hazards. Managers must build trust within their teams in order to encourage open communication. They can do so by:
 - routinely checking in with workers about ways to make the workplace safer;
 - asking workers what additional support they might need to operate more safely;

- listening to worker feedback about safer work processes;
- recognizing employees for speaking up about safety hazards and possible solutions; and
- including all workers, such as contractors, temporary workers, seasonal workers and part-time workers as part of the mission, the message and the metrics of safety.

STEP 2: Mobilize Leadership at All Levels Within Your Organization

Company culture starts at the top. Use this MSD Pledge Guide and our [MSD Pledge Resources](#) to help your company leaders—from C-Suite to managers to frontline supervisors—become familiar with MSDs and their underlying risk factors, and to make a business case for fostering a safer culture in your workplace. Engage stakeholders in leadership positions to:

- establish a company vision that centers on worker health, safety and well-being;
- create supportive lines of communication with workers (see NSC’s [Sample CEO Letter](#));
- train leaders and managers on key warning signs and hazards for MSD injuries;
 - incentivize managers and leadership to routinely check in with workers and document injuries and hazards;
 - invest resources into health and safety initiatives; and
 - enlist and empower health and safety teams to make decisions that benefit workers.

STEP 3: Engage Workers to Understand MSD Risks and Identify Possible Solutions

As an employer, it is vital that you engage your workers to understand MSD risks and identify possible solutions. Your outreach will strengthen your company’s culture of health and safety, and also help build confidence and support for your workplace safety interventions. It all starts with trust.

Companies must start by listening to their workers to understand their health and safety needs. The most effective approaches engage workers to identify risk factors, mitigation strategies and participate in decision making about MSD solutions. Workers who are **involved** in identifying solutions are more satisfied with and motivated to participate in changes to workplace operations.

Educate, train and engage workers to recognize that work-related pain or discomfort they experience is an MSD risk, and should be reported. Make clear to workers that speaking up about their health and well-being is encouraged and, in fact, in line with your company’s goals for workforce retention.

- Empower your workers in identifying areas for improvement and developing and implementing your safety protocols and interventions.
- Train managers to lead safety conversations with workers, and create performance metrics to ensure managers deliver safety messages and actively listen to workers’ needs.
- Motivate workers and managers effectively by making participation in health and safety conversations—both reporting injuries and identifying solutions—part of performance reviews and incentives.

Tying it Together: Create Your MSD Solutions Team

A successful MSD Solutions Program requires open communication between workers and other stakeholders, including leadership. This “teamwork” approach can take different forms based on company size and needs.

OPTION 1: Appoint an MSD Solutions Leader to Gather Direct Worker Input

An example for Small Businesses

Empower a leader within your company to listen to workers' input and provide direction for your organization's MSD Solutions Program. A strong leader in MSD risk reduction must be adept at responding to worker questions and well-positioned to coordinate with management, human resources, employee resource groups, workers, healthcare providers who specialize in MSDs and ergonomic and safety professionals. Identify someone who has the authority, trust, empathy, communication skills and capacity to serve in this role. This leader could be a designated safety champion or even a small team that shares leadership responsibilities. Leaders can gather worker input through direct 1:1 conversations, focus groups, or surveys. Leaders should share how worker input is being incorporated into the MSD Solutions Program and continue gathering information on whether new solutions are working.

OPTION 2: Convene an MSD Solutions Task Force

An example for Large Businesses

Larger companies may want to establish an MSD task force with representation from each of the key departments. Include diverse representation across levels of the workforce who can help speak to the unique needs of your workers' well-being. For example, people from **communities of color** often face systemic racism and barriers to healthcare; **parents** may face increased fatigue from caring for children at home; and workers face vulnerabilities to MSD injuries **as they age** or as a result of underlying conditions. A diverse and inclusive task force will help your company better understand and solve for the variety of underlying factors that lead to MSDs.

An MSD task force would do well to include safety professionals, engineering staff, maintenance workers and other operations team members. Members of your MSD task force will vary depending on the makeup of your company.

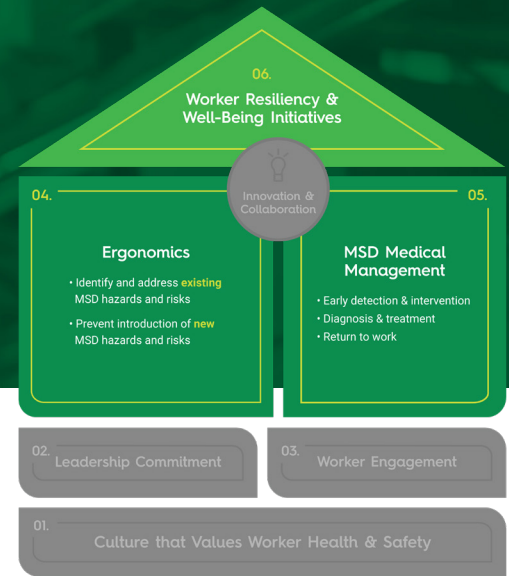
Empower MSD Solutions Leadership

Make sure your MSD Solutions leader or task force is well equipped to:

- review the latest public health, legal and safety considerations that can inform the development of your company's MSD Solutions Program;
- coordinate among different internal departments and external stakeholders
- present to and influence leadership;
- use workers' compensation data at your organization to inform hazard assessments;
- conduct workplace assessments to identify risks;
- gather employee and worker feedback in real time and listen to questions and concerns;
- engage employees and workers from disproportionately impacted communities, via employee resource groups that represent workers at highest risk;
- reviews best practice recommendations and ROI of ergonomic interventions within your industry;
- develop a comprehensive MSD Solutions Program tailored to your industry and company needs;
- budget for and invest in evidence-based and innovative solutions; and
- monitor and gather evidence for the effectiveness of solutions implemented.

PART II

Construct a Comprehensive MSD Solutions Program at Your Workplace



With a supportive, worker-centered culture in place – and a leader or task force identified and empowered to lead your effort – your company can begin to take steps to reduce the risk of MSD injuries and create a safer environment for your workers. A comprehensive MSD Solutions Program:

- reduces new and existing risks through ergonomic solutions;
- promotes MSD recovery through medical management; and
- supports the health of the worker through worker wellness initiatives.

STEP 4: Reduce MSD Risks Through Ergonomics

A crucial element of an MSD Solutions Program is the application of ergonomics. Ergonomics is the science for designing work systems that minimize injury while maximizing performance. Ergonomics considers the workers—their abilities, limitations, and characteristics—as well as the tasks, jobs, workstations, tools, equipment, and the work environment to design a system to preserve workers' well-being and reduce illness and injuries, especially MSDs. Ergonomics is used to:

1. Identify and address existing MSD hazards and risks.
2. Build systems to prevent the introduction of new hazards and risks.

By understanding how MSD injuries occur in your workplace, you can select the right type of intervention to implement for your company's MSD Solutions Program.

How Do MSD Injuries Occur?

MSDs are injuries or disorders of the muscles, nerves, tendons, joints, cartilage and spinal discs caused by work-related risk factors such as heavy lifting, pushing or pulling heavy loads, working in awkward or sustained postures, or repetitive movements. Injuries occur when the amount of force that is applied to the body exceeds the body's tolerance for the task.

When a large amount of force is applied at a single instant, an acute injury may occur. MSD injuries however, **occur** when a low to moderate amount of force is sustained or applied repetitively over days, weeks, months or even years. Task repetition results in fatigue, decreasing the body's resistance to injury, eventually causing even low forces to exceed the body's tolerance to injury.

Here are a few tips to reduce risks related to force and repetition:

DECREASE Force Applied in a Task

- Lighten loads before lifting
- Rearrange work stations so less lifting is required
- Use machinery to lift heavy material

DECREASE Task Repetition

- Automate repetitive tasks
- Build in a regular break schedule to allow the body to rest and recover
- Vary the type of work an employee does on each shift
- Limit shift lengths
- Change work positions
- Adjust quotas to reduce the number of repetition cycles required in a single shift

Poor posture is another source of strain on muscles, tendons and bones that increase vulnerability to injury. Promoting proper workplace posture is a key strategy to protect workers from MSDs. Employers can take a number of actions to promote safer, ergonomic postures.

- **Invest in ergonomic furniture and equipment** that supports proper posture for a task.
- **Establish policies and protocols** that prevent poor posture from occurring (such as policies for proper storage height of equipment).
- **Educate workers** about protective postures for different types of work.

Check out different examples of ergonomic postures:

01.

WORK AT WAIST HEIGHT

Lifting an item directly off the floor or awkwardly stretching to reach a high item greatly increases the likelihood of injury. Store heavy and commonly used items off the floor and close to waist height with benches, stands, carts or worktables.

02.

BEND BETTER

The best bending is no bending. Keep work at waist height and use lifts or carts to carry. When bending is necessary, bend at the hips and knees, keeping the back straight. Use platforms, benches and tables to store items at or above knee height to avoid injury.

03.

CLOSE AND CENTER

Carry items close to the body and at waist height. At desks and workstations, keep commonly used materials close to the body to avoid reaching and stretching. Keep work directly in front of the body, aligning head, shoulders, core and legs to prevent awkward twisting or stretching of the spine.

04.

LOOK STRAIGHT AHEAD

Keep computer screens and work directly ahead of the body, below eye level while the head and neck are straight and a comfortable arm's length ahead. Enlarge screen view, adjust for glare, or use corrective lenses as necessary to prevent leaning forward or straining to see.

05.

HANDS BELOW HEAD

Keep tasks below shoulder height to avoid awkward and fatiguing postures. Even light work performed above the shoulders can greatly accelerate fatigue. Use platforms or ladders to bring the body up to an appropriate work height or extenders on equipment that is out of comfortable reach.

06.

STRENGTHEN POWER GRIPS

When possible, pick tools that allow for a full hand power grip over a pinch grip which uses the fingers. Ensure tools are well fitted for the hand of the worker and keep the wrist supported in a strong natural position. Select tools with low vibration and no kickback.

07.

PROTECT PINCH GRIPS

Repetitive forceful pinch grips (finger grips) are the strongest predictor of arm and hand MSDs. For precision work that requires a pinch grip, lighten the force applied when possible and build regular rest and job variation into the day.



Vibration

Vibrating tools or machinery increase the force that is required to perform a task, or may force a worker into an awkward posture to control the equipment, increasing the onset of muscle fatigue. Prolonged exposure to vibration may cause a worker's hands or limbs to go numb, making it more difficult for a worker to control how much force they are applying to a task, leading them to use more force than is needed. Vibration also causes direct stress on internal organs, nerves, blood vessels and joints.

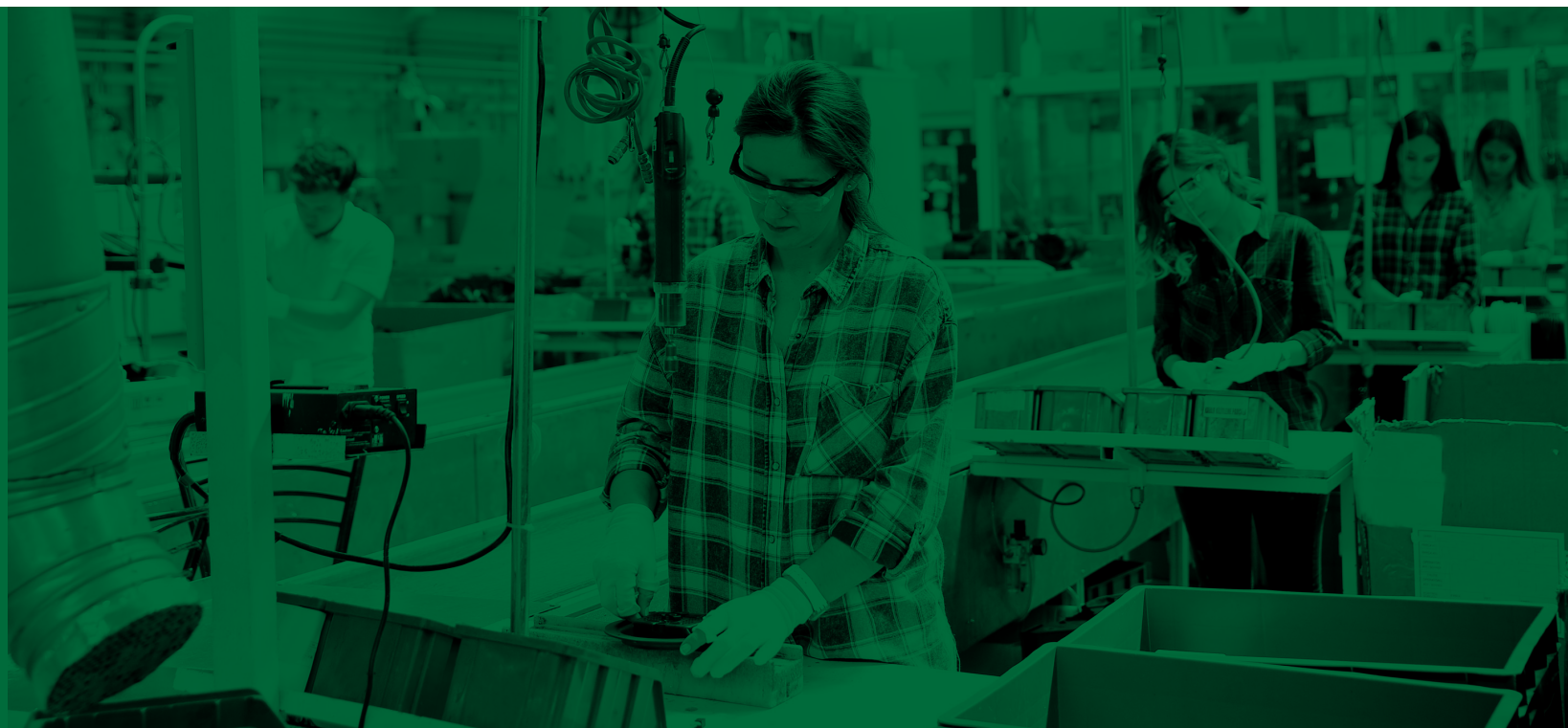
Safe work practices to minimize exposure to vibration include:

- Purchasing anti-vibration tools and equipment
- Encouraging regular breaks
- Restricting or limiting time spent on vibrating surfaces
- Maintaining equipment to avoid excessive vibration
- Installing vibration dampening seats in high vibration vehicles

Temperature

Similar to vibration, cold **temperatures** (or cold materials) may cause hands to become numb, making it harder for a worker to judge and control for the amount of work that is needed for a task. Cold environments also make the body less flexible, and people who feel cold may be more susceptible to working in awkward postures as they huddle to keep warm. On the other hand, when it is too hot, workers often tire faster. The onset of fatigue makes workers more susceptible to injury.

The Occupational Safety and Health Administration (OSHA, 2003) **recommends** keeping workplace temperature between 68 - 76 degrees Fahrenheit, but check in with your employees to see what temperatures they are most comfortable working in. For outdoor work environments, install outdoor heaters or coolers around primary work areas, adjust dress code expectations and advise employees on attire suitable for comfort and performance.





What Types of MSD Solutions Should I Consider?

When selecting an ergonomic intervention, remember that solutions that change the work environment are often more effective than those that put the burden of change on the worker. They are also more cost-effective in the long run. Safety professionals refer to this range of options as a “hierarchy of controls,” which emphasizes that workplace design and engineering controls have the most impact for reducing MSD risk.

MOST IMPACTFUL

Elimination

Examples: Removing workers from areas with harmful vibrations; avoiding equipment or materials that require employees to use a pinch grip; repositioning workstations or materials to eliminate need for reaching or lifting.

The most effective ergonomic solutions tailor the workplace environment to remove hazards entirely. Elimination strategies are easiest to implement in the design phase for a new workplace or work process. ([Check out “Prevention through Design,” by NIOSH](#)).

Substitution

Examples: Automating repetitive processes; reducing weight of materials or loads; replacing power tools with low vibration alternatives.

Substitution is another highly effective solution that involves replacing materials, equipment, or processes with less hazardous alternatives.

Engineering Controls

Examples: Adjustable workstations; ergonomic hand tools; conveyor belts to move materials; robots to perform tasks; lighting; temperature controls.

When eliminating or substituting a hazard is not possible, you can minimize risk with engineering controls. Engineering controls adjust the work environment or work process to protect the worker from an MSD hazard, and often make it easier for workers to perform their tasks. By emphasizing changes to the workplace environment, companies can reduce the burden of safety from the worker and minimize risk for human error.

While engineering controls may have the highest upfront costs, they produce the highest return on investment, and can even improve worker productivity. Check out NSC’s [overview of safety technologies](#) for the workplace and [tools](#) for identifying which technologies are right for your business.

Administrative Controls

Examples: Scheduling regular breaks; rotating job tasks; worker conditioning and flexibility training; training on proper lifting and moving techniques.

Administrative controls adjust how people work, and can be written into company policies or built into workplace routines, enhancing your company's safety culture. Administrative controls are relatively easy to implement and offer a baseline degree of protection before a company is able to invest in engineering controls.

Our **Policy & Procedures Checklist** includes a number of recommended administrative controls.

Personal Protective Equipment (PPE)

Examples: Floor mats; anti-vibration gloves; back braces; boot insoles; knee pads.

PPE are materials that provide the worker a buffer against a workplace hazard. PPE is often wearable or in direct contact with the worker. Generally PPE for MSD prevention is relatively inexpensive upfront, but may offer minimal protection to the worker. PPE should be the last line of defense.



What Are the Steps to Implement an Ergonomics Program?

The following checklist explains how to apply ergonomics in your operations.

GOALS

- Identify and address existing MSD hazards and risks
- Build systems to prevent the introduction of new MSD hazards and risks

IDENTIFY RISKS

- ☐ Review existing data, including worker and **Bureau of Labor Statistics** reports.
- ☐ Conduct walkthrough inspections for hazards.
- ☐ Talk with your workers about the risks they experience.

IDENTIFY SOLUTIONS

- ☐ Engage workers in the identification of potential ergonomic solutions.
- ☐ Whenever possible, select interventions that change the work environment over interventions that require change from the worker.
- ☐ Consider investing in innovative technologies for safer working environments. See NSC's **tools** for assessing your organization's readiness to implement safety technologies and identify which safety technologies are right for your business.

TRIAL IDEAS

- ☐ Pilot new ideas with a small segment of your workforce, or with rented equipment.
- ☐ Ensure no new hazards are introduced through the intervention.
- ☐ Gather data on effectiveness and make modifications as needed before investing in a full scale intervention.

MAKE CHANGES

- ☐ Implement ergonomic solutions at full scale.
- ☐ Train workers on new equipment or processes.
- ☐ Allow time for workers to adapt to new protocols and become proficient with new technology use.

EVALUATE EFFECTIVENESS

- ☐ Collect and analyze pre and post data to measure the effect of your intervention.*
- ☐ Ensure no new hazards were introduced as part of the intervention.
- ☐ Make modifications as necessary.

** It is normal to see a rise in reported signs and symptoms of injury when a business first implements an ergonomics program — this just means more employees are aware of their risk factors. Over time the injury rates should decline. If injury rates do not decline or new symptoms continue to appear among your employees, you may need to modify your intervention.*



STEP 5: Create a Medical Management System for Workers Who Experience MSD Injuries

Efforts to address work-related injuries must go beyond prevention and consider the needs of workers who develop MSDs. If not properly managed, MSDs can progress to chronic disorders resulting in lifelong disability. Employers can prevent these outcomes and minimize business costs by implementing systems for early detection, coordinating with healthcare providers for diagnosis and treatment and establishing tailored return-to-work protocols with a medical management team.

Promote Early Detection and Intervention

Systems that promote early detection and accurate reporting make it easier for workers to access early treatment, which is often far less costly than advanced MSD injuries. Early detection also provides valuable insight about the underlying causes of injuries, which allows employers to intervene and take steps to prevent. You can create a workplace culture that rewards early and accurate reporting.

- **Train workers** to recognize early signs and symptoms of MSDs.
- **Train managers** to build regular check-ins for MSD symptoms as part of their conversations with workers.
- **Establish systems** for early reporting.
- **Assess causes** of symptoms and create processes to intervene as appropriate.

Coordinate With Resources for Diagnosis & Treatment

While employers do not play a direct role in diagnosis and treatment, companies can facilitate medical management.

- **Contract with healthcare** providers who specialize in treating MSDs.
- **Welcome healthcare providers** on-site to conduct job assessments.
- **Communicate with and support injured workers** as they progress through rehabilitation and prepare to return to work.

Establish a Safe Return-to-Work Protocol

Employers should establish a coordinated return-to-work team that engages human resources, the healthcare provider and the worker to:

- **Determine safe return-to-work protocols**, including necessary leave time, work restrictions, transitional duty options and modifications of job tasks and work stations;
- **Create a flexible working arrangement** for injured workers to continue rehabilitation sessions (e.g., physical therapy, occupational therapy, vocational therapy) while working; and
- **Provide resources for mental well-being** such as, employee assistance programs, coverage of counseling sessions to manage kinesiophobia and other psychosocial factors and navigating “life after injury”.

STEP 6: Strengthen Worker Wellness Initiatives

Worker health matters to promote individual strength and boost tolerance against MSDs. Fatigue, workplace stress and systemic inequities in well-being all make workers more vulnerable to musculoskeletal injury. Furthermore, **Mercer's Health on Demand 2021 Report** shows that investing in workers' physical and mental well-being decreases turnover and creates a more engaged and productive workforce.

Promote Physical Well-Being

Sleep, exercise, hydration and nutrition promote muscle and bone health and strength which builds tolerance against musculoskeletal injury. Ideas to strengthen worker well-being include:

- Team exercises
- Strength and flexibility training
- Wellness seminars
- On-site nutritious snacks and hydration options
- On-site fitness options
- Company fitness challenges
- Subsidized gym memberships

Support Mental Health

Workplace stress contributes to and is worsened by MSD injuries. Muscular tension and poor posture caused by stress and fatigue predispose workers to injury. On the flip side, in a psychologically supportive environment, workers feel safe speaking up about risks and injuries before they develop into problems. Promote mental well-being with tools appropriate for your workforce. Consider offering:

- Flexible work policies
- Mental wellness education and training seminars
- Mental health days
- Paid family leave policies
- Team bonding activities
- Protocols for communication outside working hours
- Insurance coverage for mental health treatment, especially for workers coping with MSDs



Ensure Equitable Solutions

Experiences of MSDs are not felt equally across populations. Workers in jobs requiring manual labor or exposure to hazardous working conditions are often those with a lower wage, language barriers and from under-resourced communities. These same communities often experience the greatest structural barriers to acquiring care from a medical system with a history of discrimination and racism.

Employers need to promote equitable solutions that foster a sense of belonging and protect the mental, physical, psychological and emotional integrity of all workers. These solutions include:

- A diverse safety task force
- Equitable policy implementation
- Policies that uphold dignity and respect for all workers
- Policies that acknowledge unique challenges faced by vulnerable communities
- Safety resources and educational materials in other common languages besides English
- Enhanced job control through worker input on job tasks, performance goals and safety protocols
- Livable wages
- Comprehensive insurance coverage for all workers
- Contracts with culturally competent health and safety professionals

More NSC Resources for Worker Wellness Initiatives

- [Equitable Solutions for MSDs: A Checklist](#)
- [Prioritizing Employee Mental Wellbeing](#)
- [Fatigue Toolkit for Employers](#)



PART III

Innovate and Collaborate



Companies across the country are stepping up for their workers and committing to MSD Solutions through the MSD Pledge. The MSD Pledge, just one component of the MSD Solutions Lab, is a first-of-its-kind commitment from employers to identify and reduce workplace MSD risks, foster a culture of safety, share lessons learned, and regularly report on progress. The **NSC mission** is not only to save lives, but also to prevent injuries, and the MSD Solutions Lab is an important step forward to help solve this problem. We welcome you to the solution, to help your workers – and workers everywhere – live their fullest lives.

By sharing ideas and collaborating with other employers, your company can accelerate our understanding of MSD solutions across all businesses, benefit from other companies' shared expertise and better protect workers everywhere. NSC will continually reinvest the latest knowledge and learnings of best practices into the resources we provide - bettering solutions for everyone. Companies that sign the MSD Pledge will be encouraged to:

- Contribute to NSC research
- Participate and share in NSC innovation events
- Submit best practices and new ideas to be featured in our case studies



Help Us Reduce MSD Risks and Subsequent Injuries by 25% by 2025

Through the MSD Solutions Lab and its initiatives, we aim to affect millions of workers worldwide and reduce MSD risks and subsequent injuries by 25% by 2025. When companies across the country – and the globe – are investing in MSD solutions, this will further drive a market for innovation to make safety easy and accessible for companies both big and small. By signing the MSD Pledge, your company is taking action to support your workers and contribute to healthier workplaces everywhere.

Help us achieve this goal by:

- Working with an inclusive team at your organization to uphold your pledge commitments.
- Ensuring 100% of your employees are covered by your pledge commitments. Include your part-time workers, temporary workers, seasonal workers and contractors.
- Getting involved in NSC events and joining NSC's mission to improve the wellbeing of all workers.
- Reaching out to other companies within your spheres of influence. Share the MSD Pledge and encourage your industry partners (e.g., suppliers, customers, service providers) to join the movement!



We are dedicated to ensuring the health and safety of all workers at our workplaces through the evaluation and reduction of musculoskeletal disorders (MSDs), the leading cause of workplace injuries across all industries. **We pledge to:**

Reduce risks. We will analyze the causes of MSD injuries across our operations and invest in solutions and practices that reduce risk to our workers.

Innovate and collaborate. We will leverage best practices and share our learnings and countermeasures to expand upon innovations to improve our own safety practices and reduce MSD risks.

Build an organizational culture that values safety. We will promote and ensure a workplace where safety excellence, transparency, and accurate reporting are equally valued. Everyone, at every level of our organization, is accountable for the safety and health of our workforce.

Commit to a significant reduction of MSD injuries. We believe that through risk analysis, improved training, and investment we can create safer outcomes for millions of workers worldwide. We pledge to reduce MSD risk and subsequent injuries by 25% by 2025.

Together, we can improve workplace safety, reduce MSD risks, and enhance the well-being of workers around the world.

Questions? We've got you covered.

Email msdsolutionslab@nsc.org

For More Information

CENTERS FOR DISEASE CONTROL AND PREVENTION

<https://www.cdc.gov/workplacehealthpromotion/health-strategies/musculoskeletal-disorders/index.html>

NATIONAL INSTITUTE FOR OCCUPATIONAL HEALTH & SAFETY (NIOSH)

<https://www.cdc.gov/niosh/topics/ergonomics/ergoprimer/default.html>

<https://www.cdc.gov/niosh/topics/hierarchy/>

<https://www.cdc.gov/niosh/twh/default.html>

<https://www.osha.gov/vpp>

<https://www.cdc.gov/niosh/topics/future-of-work/default.html>

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

<https://www.osha.gov/ergonomics>

<https://www.osha.gov/safetypays/estimator>

BUREAU OF LABOR STATISTICS

<https://www.bls.gov/iif/oshwc/case/msds.htm>

HUMAN FACTORS AND ERGONOMICS SOCIETY

<https://www.hfes.org/About-HFES/What-is-Human-Factors-and-Ergonomics>

INTERNATIONAL ERGONOMICS ASSOCIATION

<https://iea.cc/what-is-ergonomics/>

INJURY FACTS

<https://injuryfacts.nsc.org/work/safety-topics/musculoskeletal-injuries/data-details/>

UNITED NATIONS

<https://sdgs.un.org/publications/transforming-our-world-2030-agenda-sustainable-development-17981>

EUROPEAN AGENCY FOR SAFETY AND HEALTH AT WORK

<https://osha.europa.eu/en/publications/workforce-diversity-and-musculoskeletal-disorders>

SOCIETY FOR INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY

<https://www.siop.org/Business-Resources>

INSTITUTE FOR WORK AND HEALTH

<https://www.iwh.on.ca/tools-and-guides/reducing-msd-hazards-in-workplace-guide-to-successful-participatory-ergonomics>

NATIONAL ATHLETIC TRAINERS' ASSOCIATION

<https://www.nata.org/professional-interests/emerging-settings/occupational-health>