An equitable, **healthy workplace** for every worker is essential to making real progress to improve workplace safety and reduce musculoskeletal disorder (MSD) risk.

**What is health equity?** As the CDC explains, “Health equity is achieved when every person has the opportunity to attain his or her full health potential and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances.”

Certain communities within your workforce will be at higher risk for MSDs. This may be due to a variety of factors, including:

- Social and environmental inequities that influence job opportunities, health and wellbeing
- Disparities in access to medical care
- Overt or subtle discrimination and bias, including by medical providers
- Personal characteristics such as socio-economic status, race, ethnicity, immigrant status, sex, gender, sexual orientation, age, disability, etc.
- Other factors outside a person's control

Being attuned to these individual and systemic factors – and taking an inclusive approach to address them – can help your company make big gains in reducing injuries and improving health equity, leading to a healthy workplace. This step-by-step guide will help get you started.
STEP 1: Learn about the disparities that influence MSD risk.

To tailor your risk reduction strategies to the various worker populations at your company, it’s useful to know some of the factors, inside and outside the workplace, that put those populations at risk. Below are some key examples.

While it may be tempting to assume there are no disparities at your company, it’s worth challenging yourself to deepen your awareness and examine whether unintended bias in your company policies may be exposing workers to MSD risk in any of these ways.

Socio-economic Status

- **Low-wage workers** are more likely to occupy labor-intensive positions and be exposed to hazardous working conditions.
- Low-wage workers are less likely to report MSD injuries to management when they occur, citing concerns of dismissal, reduced hours and medical costs.
- Low-wage workers are frequently hired into nonstandard work arrangements, which often exposes workers to higher injury risks than those faced by workers in standard positions.

Race, Ethnicity and Immigrant Status

- Black, Hispanic/Latino(a) and immigrant workers are more likely to be employed in low-wage positions and labor-intensive and/or hazardous occupations.
- Many Black, Hispanic/Latino(a) and immigrant workers often cite fear of discrimination as an additional barrier to reporting MSD injuries to management.
- Hispanic/Latino(a) and foreign-born workers experience high rates of occupational injuries. Hazardous working conditions, lack of workers’ compensation, short time in current employment, language issues and not working in their regular jobs are some of the factors workers report.
- When injuries occur, these workers often experience **cultural barriers to accessing care**. For example:
  - Black people in the United States have been subject to **medical abuses**, are frequently misdiagnosed due to **biased perceptions of their pain tolerance** and, as a result, are often **less trusting of medical interventions**.
  - Hispanic men may experience **cultural pressures** discouraging them from admitting pain.
  - **Non-English speaking workers** may not have access to information about their conditions and treatment options in their language.

**Sex, Gender and Sexual Orientation**

- Research is still in early stages to understand the influence of work environment on MSDs risk and job accommodation needs that address **complex sex and gender issues**.
- Women make up more than 40% of the global workforce, yet many current **health and safety guidelines** and design requirements are based on studies and characteristics of men.
  - As a result, some work environments are designed for the average man, which may inadvertently put women and smaller workers at greater risk. For example, a fixed counter-height workstation designed for an average height man at 5’10”, may increase the risk of injury of a 5’2” female, especially if high forces are involved.
  - Women who perform the same tasks as men are at **higher risk** of injury, as certain job tasks may require women to engage their muscles at near maximum capacity compared to men.
  - Women report pain, discomfort and other symptoms of MSDs in the neck and shoulders about twice as often as men.
- Men are more likely to experience lower back injuries due to the fact that they are more likely to occupy jobs that involve material handling tasks with high force.
- Due to limited data and a hesitancy to disclose sexual orientation or transgender identities, little is currently known about MSD risk among LGBTQ+ workers. However, **evidence of discrimination** and psychosocial risk factors in the workplace are likely related to increased risk for musculoskeletal injuries.

**Age**

- The risk of developing MSDs increases as we age. Physical conditioning and the body’s ability to recover from work decline with age.
- A history of an MSD increases the risk of a future MSD. At least **one-third** of workers who had an occupational injury will experience a new injury after returning to work.
- Older workers, particularly in labor-intensive industries, are often subject to **hiring discrimination**, which limits their ability to secure standard work positions that offer more protection and benefits.
Disability

• Workers with cognitive and learning-related disabilities are disproportionately hired into lower-wage positions.
• These workers are often placed together in work environments apart from other colleagues, obscuring visibility into the workplace risks they are experiencing.
• Cognitive disabilities may impact workers’ understanding of training and education materials. Workers may need you accommodate different learning styles in order for them to benefit from your company’s instruction and comply with safety recommendations.
• Workspace designs that don’t accommodate for variations in ability and need may add to the vulnerabilities for people with pre-existing physical disabilities.

STEP 2: Know who is at risk.

Do you know who in your workforce already has an MSD? Do you have the robust demographic information you need to know who might be facing additional challenges? Those insights will help you address MSD risk equitably. Here are some actions to help you get the knowledge you need so you can craft an equitable response:

• **Foster a safe culture of reporting.** When employees feel empowered to speak up about their injuries, you get a better understanding of who is already dealing with MSDs and who needs support. You can encourage accurate injury reporting by regularly educating team members about MSD signs and symptoms, risk factors, reporting processes, and the options available for treatment and early intervention. Emphasize protections against retaliation for reporting MSD injuries or workplace risks. And train managers to check in with employees to better detect early warning signs of pain and convey concern. You can get more detailed guidance in our MSD Pledge Guide.

• **Gather the right data.** The limited categories on OSHA-300 forms and employee short forms for reporting to the EEOC and their equivalent global injury forms may not tell you all you need to know about the makeup of your workforce. To supplement this, you can revise your organization’s data collection strategy to include expansive and non-restrictive demographic information. Consider talking to your employee resource groups (ERGs) about what categorizations may be relevant to include.

• **Ask employees to self-identify.** OSHA-300 forms and other organizational injury metrics are often completed by a manager or HR representative on behalf of the injured employee. That leader may be guessing at the identity of the injured employee or leaving sections blank. Instead, give the employee the opportunity to self-identify and to describe the injury and its causes from their perspective.

• **Be transparent.** Make it clear that demographic data – in all ways employees see themselves – is important for creating an equitable and inclusive work environment. After all, you can’t address what you can’t measure. Then, share how you’re using that data to respond with action. It’s better to over-communicate through emails, safety huddles, company town halls, team meetings or other methods to build trust, increase reporting and show progress.
STEP 3: Ensure your ergonomic interventions work for everyone.

When it comes to the creation of new programs, practices or ergonomic designs to combat MSDs, make sure that no worker group is inadvertently excluded from your solutions.

- **Validate your solutions with employees.** Before implementing new solutions and interventions, collect employee feedback and validate the effectiveness of the solutions.
- **Make things as simple as possible for as many people as possible.** Ergonomic solutions are most effective when they’re simple, widely accessible and available to as many people as possible.
- **Provide multiple options for how people can work, when possible.** Solutions will work differently for different people. Offering a variety of solutions whenever possible will allow people to identify what works best for them.
- **Talk to workers across your organization to inform your work.** To know what mitigation strategies and ergonomic solutions will address for the unique needs in your workforce, look outside your own expertise for guidance. Consult and brainstorm with employee resource groups, conduct user studies, launch focus groups and integrate the feedback from those conversations into your MSD solutions.
- **Provide job accommodation for special populations and those with permanent disabilities.** You may need to provide additional job accommodations for special populations and workers with permanent disabilities under the Americans with Disabilities Act (ADA). The government website ada.gov is a good source of information and technical assistance.
  
  » Also check out Staying Safe at Work, a NIOSH curriculum for teaching workers with intellectual and developmental disabilities about health and safety on the job.

STEP 4: Ensure your ergonomic interventions work for everyone.

MSD signs and symptoms are experienced differently by each employee, and they may evolve over time. Employers will need to be flexible and open to different approaches. That includes creating clear lines of communication between the employee, employer and healthcare provider.

- **Let workers know where to go with questions.** Your company’s inclusive response to MSD risk will likely involve HR, safety and other related departments. Communicate clearly about where workers should go and to whom they should talk for answers, whether it’s an individual point of contact or a team focused on these issues.
- **Coach workers to consistently and properly use all MSD solutions and interventions.** Many MSD solutions will create new processes or workflows. Coaching and reinforcement will help them become habit. This is especially important for the interventions where the old processes are still available to the workers.
- **Regularly evaluate interventions.** Are you seeing an improvement in outcomes for employees with MSDs? Are ergonomic innovations or engineering controls available that might offer relief to employees in need? Part of your commitment to equitable outcomes should be regularly investigating whether there are new options that can be
helpful, and giving employees from historically excluded backgrounds and/or nonstandard workers opportunities to test out those options.

• **Prioritize health and safety at all times.** It’s worthwhile for employers to pursue ergonomic innovations, as well as to find the most cost-effective solutions that balance workers’ well-being with business needs – but none of this can be done at the expense of safety. Unsafe shortcuts will jeopardize your workforce’s health and be much more costly in the long term, both financially and in lost trust, attrition, and damage to your overall workplace culture.

**STEP 5: Continuously engage employees.**

An inclusive, equity-focused approach to MSDs can’t just be a one-time action. Instead, you should expect to iterate your work as you discover sources of risk, as work conditions evolve, and as your workforce composition changes. That means ongoing engagement with your employees.

**Consider how to involve your employees through:**

• Integrating workers – your best on-the-ground partners – into your MSD solutions teams.
• Collaborative site walkthroughs and job assessments, with manager/worker teams to identify, describe and evaluate MSD risks through workers’ perspectives.
• Regular employee surveys to assess the strength of your safety plans, MSD risk reduction efforts and ergonomic solutions.
• Periodic (e.g., quarterly or annual), company-wide surveys to make sure employee demographic information is up-to-date. These can also include opportunities for feedback to inform further MSD solutions such as new designs, tools, workflows or insights from other worksites/industries.
• Regular dialogues (e.g. all-hands meetings and other company-wide conversations) where employees can offer anecdotal feedback and hear how leaders are responding with tailored solutions.

This NSC initiative on Equitable Solutions for MSDs is aligned with the [Decent Work Agenda](http://www.ilo.org) of the International Labour Organization and the [United Nations 2030 Sustainable Development Goals](http://www.un.org) to ‘promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all’.
References:


World Health Organization. (2022). Social Determinants of Health. Available at: https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1