

## How to Identify Ergonomic Risk Factors in the Workplace

Are you experiencing discomfort, pain, or fatigue during your workday? Are you spending extended periods of time performing repetitive work in awkward postures, lifting heavy loads without adequate support? If so, you may be at an increased risk of developing ergonomic work-related musculoskeletal disorders (MSDs), such as lower back injuries, carpal tunnel syndrome, contact stress, torn ligaments, etc. Thankfully, there are measures that you can implement to recognize and alleviate ergonomic challenges in the workplace.

In this guide, we will take a deep dive into the five most important steps to identifying ergonomic risk factors in the workplace, including a workplace analysis, evaluating work tasks, postures, and movements, reviewing worker feedback, developing and implementing control measures, and monitoring the effectiveness of the occupational health and ergonomics program. These measures can help cultivate a work environment that prioritizes occupational safety for you and your coworkers.

What are the five most important steps to identifying ergonomic risk factors in the workplace?

- 1** ● **Conducting a workplace analysis**
- Evaluating work postures, movements, and forces** ● **2**
- 3** ● **Reviewing workers' feedback and complaints**
- Developing and implementing control measures** ● **4**
- 5** ● **Monitoring the effectiveness of the control measures**

## » 1 Conducting a workplace analysis

This step involves reviewing the work environment, identifying repetitive tasks, and work activity that may pose ergonomic risks. It is essential to look at the physical and organizational characteristics of the work environment, such as the layout of the workspace, lighting, temperature, noise, and pace of work.

### Review the work environment and identify tasks and activities that pose ergonomic risks.

#### Ergonomic assessments

Ergo Evaluations involve analyzing the job's physical demands and identifying potential ergonomic concerns. It can be done with observation, interviews with workers, and specialized equipment to measure physical stress on the body.

#### Review incident and injury reports

By delving into incident and injury reports, you can discover trends and patterns that may reveal areas of concern. This can allow you to zero in on specific tasks and activities that pose potential ergonomic risks and address them before they become major problems. With a little detective work, you can help create a safer, healthier, and more ergonomic workplace.

#### Survey workers

Unlock valuable information about potential ergonomic risks by surveying workers and exploring their experiences and concerns. By asking the right questions, you can uncover critical details about tasks and activities that may be causing discomfort or pain, giving you the information needed to address potential hazards and create a safer workplace. With a little effort and the willingness to listen, you can work with your team to identify and address ergonomic risks, promoting a happier, healthier, and more productive workplace.

#### Reviewing production records

By peering into production records, you can detect tasks and activities that may be subjecting workers to repetitive motions, overexertion, or other ergonomic threats. Armed with this knowledge, you can take proactive steps to address potential hazards, minimize the injury risk and discomfort, and optimize processes for maximum efficiency and safety.

#### Observing work practices

By observing how tasks are performed, you can identify tasks and activities that may be causing ergonomic hazards. This can aid you in pinpointing potential areas for improvement and creating effective control measures.



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## Look at the physical and organizational characteristics of the work environment, such as the layout of the workspace, lighting, temperature, noise, and pace of work.

### Walk through the workspace

By physically walking through the workspace, you can get a firsthand sense of the layout, lighting, temperature, noise levels, and pace of work. This can enable you to spot potential hazards lurking beneath the surface, such as poor lighting that can lead to eye strain, tripping hazards that can cause falls and injuries, or excessive noise levels that can damage workers' hearing and increase stress. Armed with this information, you can take proactive steps to address these hazards and create a safer, healthier, and more ergonomic work environment for everyone. So why not take a stroll and see what you can discover?

### Complete a safety inspection

You can survey workers to get their opinions on the physical and organizational characteristics of the work environment. This can help you identify areas of concern and gather ideas for improvement.

### Reviewing safety data

You can check safety data to identify patterns and trends that may suggest areas of concern. For example, suppose there are many slips, trips, and falls in a particular area. In that case, this may indicate hazardous workplace conditions that need to be addressed.

## Consider the demographics of the workforce, including age, physical ability, and gender.

### Organize a demographic survey

You can survey the workforce to gather information on demographics, such as age, physical ability, and gender. This can help you identify potential risks and develop solutions tailored to your workforce's needs.

### Analyzing incident and injury data

You can analyze incident and injury data to identify patterns and trends that may suggest areas of concern. For example, if there are many ergonomic injuries among older workers, this may suggest a need for ergonomic solutions tailored to the needs of an aging workforce.

### Observing workers

By observing workers, you can get a better sense of the physical abilities and limitations of the workforce.



## 2 » Evaluate Postures, Movements, and Forces

Once the work environment has been assessed, it is necessary to consider a job's physical demands on workers' bodies. This includes evaluating the postures, movements, and forces required to perform their tasks to identify ergonomic risk factors. This step may involve observing workers performing their duties, performing interviews, or using specialized equipment to measure physical stress on the musculoskeletal system.

### Evaluate the physical demands of the job on workers' bodies.

#### Complete a job analysis

A job analysis involves breaking down each task associated with a job and identifying the physical demands associated with each one. This can be achieved through observation, interviews with workers, and specialized equipment to measure physical stress on the body.

#### Consulting with experts

You can consult ergonomic experts to understand the job's physical demands better. They can provide recommendations for improvements based on their experience and expertise.



### Evaluate the postures, movements, and forces required to perform tasks to identify potential ergonomic risk factors.

#### Using ergonomic assessment tools

There are a variety of ergonomic assessment tools available that can be used to evaluate the postures, movements, and forces required to perform tasks. These tools typically involve rating the physical demand associated with each task and identifying areas of concern.

#### Observing workers

By observing workers performing their tasks, you can get a better grip on the postures, movements, and forces required to complete the job. This can help you identify potential ergonomic pitfalls and develop solutions to decrease prevalence or eliminate those hazards.

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**Observe workers performing tasks, conduct interviews, or use specialized equipment to measure physical stress on the body.**

**Time and motion study**

This involves observing workers performing job tasks over long periods of time to determine the time required to complete each step and the job's physical demands.

**Using thermal imaging cameras**

Thermal imaging cameras can measure changes in skin temperature, indicating areas of the body under physical stress.

**Risk assessment**

This involves identifying potential hazards associated with specific tasks and determining the risk associated with each threat.

**Using 3D motion capture technology**

3D motion capture technology involves using cameras and sensors to create a virtual representation of workers performing their tasks. This can provide a detailed understanding of the postures and movements required to perform tasks and help identify potential ergonomic hazards.

**Participatory ergonomics program**

Ergonomic programs entail collaborating with workers to pinpoint potential ergonomic hazards and tailor solutions to unique needs. This may include interviews, observing workers performing tasks, or using specialized equipment to measure physical stress on the body.

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**Review workers' feedback and complaints**

It is essential to consider workers' feedback and complaints to identify potential ergonomic issues that may not be visible during the workplace analysis. In addition, reviewing past injuries and illnesses related to ergonomic issues can also help identify areas of concern.

**Consider workers' feedback and complaints to identify potential ergonomic issues that may not be visible during the workplace analysis.**

**Holding focus groups**

Focus groups can be used to gather more detailed information on workers' experiences and concerns regarding ergonomic hazards. This can provide a deeper understanding of workers' issues and help identify potential solutions.



## Reviewing worker's compensation claims

Worker's compensation claims can provide valuable information on the types of injuries workers are experiencing and the tasks and activities associated with those injuries. This can help you identify potential ergonomic hazards that may not have been observed during the workplace analysis.

## Encouraging workers to report concerns

By encouraging workers to report matters related to ergonomic hazards, you can gather information on potential issues that may not have been observed during the workplace analysis. This can be accomplished through several means, including but not limited to suggestion boxes, hotlines, or scheduled meetings with supervisors.

## Perform private interviews

Allowing workers to share their experiences and concerns related to ergonomic hazards in a more private setting can help identify potential issues that workers may be hesitant to share in a group setting.

## Discuss past injuries and illnesses related to ergonomic issues.

### Analyzing injury and illness records

Analyzing injury and illness records can help identify past incidents related to ergonomic issues, as well as trends and patterns in types of injuries that occurred.

### Incident investigations

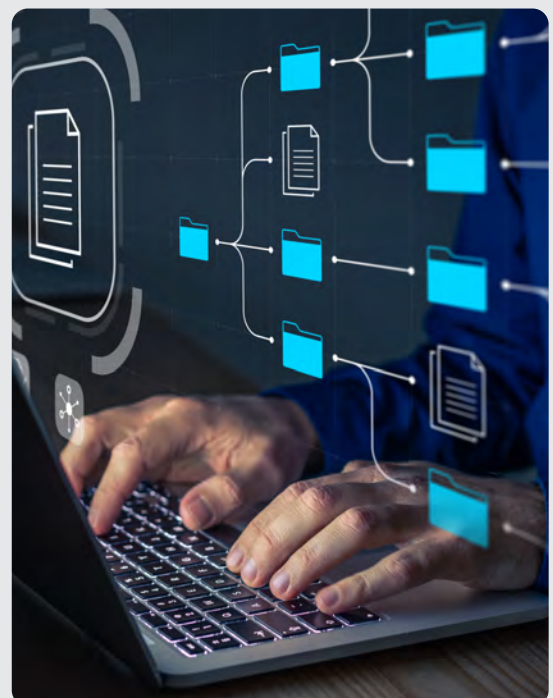
Incident investigations can help identify the root cause of past incidents related to ergonomic issues and contributing factors that may have gone unnoticed.

### Reviewing medical records

Reviewing medical records can provide information on the types of injuries and illnesses that workers have experienced and the severity of those injuries.

### Hazard analysis

Conducting a hazard analysis can help identify potential ergonomic hazards that may have contributed to past injuries and illnesses and those that may pose a risk in the future.



## Solicit feedback from workers and encourage them to report ergonomic concerns.

### Safety culture survey

A safety culture survey involves surveying workers to gather information on the organization's safety culture and the workers' attitudes toward safety. This can help identify potential barriers to reporting ergonomic concerns and develop solutions to address those barriers.

### Holding safety meetings

Conducting safety meetings provides a platform for workers to discuss their ergonomic hazards-related experiences and concerns in a group, leading to greater hazard awareness and reporting.

### Providing training

Providing training on ergonomic hazards and the importance of reporting concerns can help increase worker awareness and encourage reporting.

### Establishing an anonymous reporting system

An anonymous system can help encourage workers to report ergonomic concerns without fear of retaliation or negative consequences.

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## Develop and Implement Control Measures

After identifying ergonomic risks, the next step is to develop and implement control measures to reduce or eliminate these risks. This may involve redesigning workstations, providing ergonomic tools or equipment, modifying work practices, or implementing training programs to educate workers on safe work practices.

## Develop a plan to address the identified ergonomic risks.

### Prioritizing the identified risks

Prioritizing the identified ergonomic risks based on their severity and likelihood of occurrence can help you develop a plan to address the most pressing issues first.

### Using a team-based approach

Involving a team of experts from different departments or disciplines can help ensure a more comprehensive and practical plan to address identified ergonomic risks.

### Developing specific goals and objectives

Developing specific goals and objectives for addressing identified ergonomic risks can help ensure that the plan is focused, measurable, and achievable.

### Assigning responsibilities and timelines

Assigning duties and timelines for addressing identified ergonomic risks can help ensure that everyone is clear on their role and that the plan is executed efficiently.

### Incorporating feedback and ongoing evaluation

By integrating input from workers and continually assessing the plan's effectiveness, you can detect areas for improvement and guarantee that the plan is consistently modified and honed as necessary.

### **Prioritize control measures based on the level of risk and the feasibility of implementation.**

#### Risk assessment

Risk assessments help identify the risk associated with specific ergonomic hazards and prioritize control measures accordingly.

#### Cost-benefit analyses

Cost-benefit analyses can help evaluate the feasibility of implementing specific control measures and prioritize the most cost-effective measures.

#### Gathering feedback from workers

Gathering feedback from workers can provide insights into the feasibility of implementing specific control measures and help prioritize efforts most likely to be accepted and effective.

#### Using a decision-making framework

A decision-making framework that considers both the level of risk and the feasibility of implementation can help ensure that control measures are prioritized comprehensively and effectively.

### **Implement control measures, such as redesigning workstations, providing ergonomic tools or equipment, modifying work practices, or implementing training programs to educate workers on safe work behavior.**

#### Redesigning workstations

Redesigning workstations can involve adjusting the height of work surfaces, changing monitor angles, or providing adjustable chairs to reduce risk of musculoskeletal disorders.

#### Providing ergonomic tools or equipment

Providing ergonomic tools or equipment, such as anti-fatigue mats, wrist supports, or lift-assist devices, can help decrease the physical demands of the job and the risk of injury and discomfort.

#### Modifying work practices

Modifying work practices can involve adjusting the pace of work, rotating tasks, or providing rest breaks to reduce physical stress on the body and prevent injuries.



## Implementing training programs

Training programs can help educate workers on safe work practices and the importance of ergonomics in reducing the risk of injury and discomfort. This can also help workers properly understand how to use ergonomic tools and equipment.

## Follow-up evaluations

These can help ensure that control measures are effective and identify areas for improvement. This can help refine the ergonomic program and ensure workers are protected from ergonomic hazards.

## Ensure that workers are trained on properly using ergonomic tools and equipment.

### Provide initial training

Providing initial training on the proper use of ergonomic tools and equipment when they are first introduced can help ensure that workers understand how to use them properly.

### Incorporating training into onboarding

Incorporating training on the proper use of ergonomic tools and equipment into the onboarding process for new hires can help ensure that all workers are aware of these tools and understand how to use them.

### Providing refresher training

Providing refresher training on the proper use of ergonomic tools and equipment can ensure that workers continue to use them correctly over time.

### Using hands-on demonstrations

Using hands-on demonstrations to show workers how to use ergonomic tools and equipment properly can be more effective than verbal instructions alone.

### Performance assessments

Assessments to ensure that workers are using ergonomic tools and equipment properly can identify areas for improvement and provide opportunities for training and support.



## 5 » Monitor Effectiveness of Control Measures

The final step is to monitor the effectiveness of the control measures and continuously reassess and improve the ergonomic program. This may involve follow-up assessments, analyzing incident and injury data, or soliciting worker feedback to identify improvement areas. Maintaining a continuous monitoring, review, and improvement cycle is essential to ensure the ergonomic program remains effective over time.

### Monitor the effectiveness of the control measures and continuously reassess the ergonomic program.

#### Performing regular inspections

Routine inspections of workstations and equipment can help identify potential ergonomic hazards and implement control measures effectively.

#### Conducting ergonomic audits

Ergonomic audits can provide a more comprehensive evaluation of the ergonomic program and help identify areas for improvement.

#### Using data-driven decision-making

Using data to monitor the effectiveness of control measures and continuously reassess the ergonomic program can help ensure that decisions are based on objective evidence rather than subjective opinions.



### Conduct follow-up assessments to determine the effectiveness of the control measures.

#### Administering surveys

Surveys with workers can help identify the effectiveness of the control measures and whether any additional steps are needed.

#### Gathering feedback from workers

Gathering feedback from workers can provide insights into the effectiveness of the control measures and identify potential areas for improvement.

#### Ergonomic assessments

These assessments can help identify any ongoing ergonomic hazards and determine whether additional control measures are needed.

## Analyze incident and injury data to identify areas for improvement.

### Root cause analyses

Analyzing incidents and injuries can help identify underlying causes and contributing factors that may not be immediately apparent from an incident.

### Identifying trends and patterns

Identifying trends and patterns in incident and injury data can help highlight areas for improvement, such as particular workstations, tasks, or types of injuries.

### Comparing data across periods

Comparing incident and injury data across time periods can help identify improvements or areas needing additional attention.

### Benchmarking

Benchmarking against industry norms or other organizations can help identify areas for improvement and best practices to address identified ergonomic hazards.

### Hazard analysis

A hazard analysis can help identify specific ergonomic hazards and how they contribute to incidents and injuries.

## Solicit feedback from workers to identify potential areas for improvement related to ergonomic hazards, work practices, or the effectiveness of the ergonomic program.

### Revisiting focus groups

Revisiting previous focus groups with workers can provide a more in-depth follow-up discussion of what is and isn't working and more potential areas for improvement.

### Providing suggestion boxes

Providing suggestion boxes can allow workers to provide anonymous feedback on potential areas for improvement without fear of retaliation or negative consequences.

### Holding one-on-one meetings

Holding one-on-one meetings with workers can provide an opportunity to discuss potential areas for improvement in a more private setting and help workers feel more comfortable sharing their concerns and experiences.

### Use suggestion software

Suggestive software, such as online platforms, can allow workers to submit ideas and feedback on potential areas for improvement more quickly and anonymously.

## Maintain continuous monitoring, assessment, and improvement cycle to ensure the ergonomic program remains effective.

### Using data to drive decision-making

Monitoring the effectiveness of control measures and identifying areas for improvement can help ensure that decisions are based on objective evidence and can improve the effectiveness of the ergonomic program.

### Ongoing training and education

Ongoing training and education on ergonomic hazards and control measures can help maintain awareness and promote a culture of safety among workers.

### Establishing a process for reporting and addressing ergonomic hazards

By creating a clear and accessible process for reporting ergonomic hazards, workers are more likely to identify and report potential issues in a timely manner. This can help prevent the occurrence of more serious ergonomic hazards and may also lead to the early identification of emerging issues that can be addressed before they become a problem.

### Incorporating ergonomic considerations into new processes and procedures

Incorporating them into new methods and strategies can help ensure that potential hazards are identified and addressed before they become problems.

### Periodic program assessments

Regular program assessments help ensure that the ergonomic program meets its intended goals and identify areas for improvement that can be incorporated into the ongoing monitoring, review, and improvement cycle.

## Briotix Health Can Help

As an employer or employee, it is essential to take action to address ergonomic hazards in the workplace. By adhering to the guidelines presented in this article and instituting a proficient ergonomic program, you can assist in diminishing the chances of injury and discomfort among workers, fostering a more productive and efficient work environment, and maintaining conformity with applicable regulations and standards.

Take the first step today by reviewing the work environment and identifying potential ergonomic hazards. Engage workers in the

process, and work together to implement control measures that will help protect their health, safety, and well-being.

Remember, creating a safe and comfortable work environment is essential for a happy, healthy, and productive workforce, act today to make your workplace ergonomically safe!

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