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Labor can be harmful to physical health when proper attention isn't given to how the work is designed and performed. Improper tools, limited mobility, and other factors can lead to workers missing time from work due to soreness, fatigue, and other health issues.

Workplace ergonomics is the practice of adapting the work to fit the worker in a way that reduces the risk of musculoskeletal disorders (MSDs) and acute injuries. According to a 2022 report from the National Library of Medicine, MSDs were the primary contributing factor for nonfatal injuries in the U.S. construction industry.

When workers feel better physically, their performance tends to improve. A proactive workplace ergonomics strategy helps everyone: Employers get increased productivity, and employees get improved working conditions.

Here are a few ways construction employers can better utilize ergonomics to ensure a safer workforce.

#### **Identify the Issues**

Building an effective workplace ergonomics strategy starts by highlighting where improvements can be made. This includes investigating the environments and equipment that create the workplace. Companies can focus on the common tools and physical movements workers use to complete necessary tasks.

The selection of proper tools is a common way to improve ergonomics. For example, selecting hammers that offer lower



vibration or increased shock absorption can help reduce incidences of injuries. Selecting the proper tool size can also lead to fewer repetitive movements and less fatigue.

Nail guns are labor-saving devices, and they are also ergonomic devices because the worker does not have the repeated blows of using the hammer to drive the fastener. This reduces impact and grip issues associated with a prolonged, tightened grip like when using a hammer. Eliminating these static postures and movements can help prevent injuries.

Workers who have a static posture or use the same motion repeatedly for eight hours or more a day can start to experience health issues related to limited range of movement. Every so often, workers need to do something that increases the range.

When reviewing the movements your workers use to complete tasks, consider how they're lifting equipment and materials. Lifting objects outside the power zone between the knees and chest can result in increased fatigue and reduced efficiency.

| 1

Elevated platforms, ladders, and other tools can be used to create safer movements for your workforce.

There are ways to diversify a worker's role without compromising on productivity. Job rotation and other jobenlargement practices allow workers to perform different tasks that increase their range of motion. This creates a safer jobsite by disrupting routine work that can become monotonous. It also helps to prevent injuries associated with repeated motions, which can reduce absenteeism.

# Focus on Implementation, Training, and Assessment

To maximize the benefits of ergonomics, employers must focus on implementation once they've outlined the specific updates to their safety strategy.

Proper implementation of new practices involves assessing how the job is performed before and after the changes have been made. This ensures any unintended consequences can be identified and remedied.

After improving ergonomics among your construction team, it's common to hear workers state that the new way of doing something "feels different" or "not right." This can often be attributed to employees using new tools that require an adjustment period. Explaining the benefits of the new procedures to your team during and after training can ease the transition.

Even though the work has been set up ergonomically, proper training is still of the utmost importance so employees know all the available tools and resources they have to do the job to the best of their ability and get that project completed.

To assess how your updated safety program is performing, there are a few metrics you can use. You can start by asking workers how they feel about the work and new ergonomics strategy. This can give you a better idea of any early adjustments that need to be made.

Absenteeism rates can also be used to determine if your strategy is sound. Sometimes employees don't report workrelated health issues because they feel it will heal with time. Or workers may not report their injury and take time off to recover. If you notice workers are taking less time off or if they are reporting feeling better and more efficient, you know your strategy is working to improve their health.

Employers can also review their reported injury numbers and record what types of injuries are occurring, and they can analyze what types of injuries are most common. When you notice fewer reports of joint pain, back pain, and other ailments, that's a good sign you're on the right track. This can be indicative of corrections to an ergonomic or education strategy, and employees are better positioned to exert maximal force without sustaining injury.

## Update the Ergonomics Strategy Regularly

Proactive workplace ergonomics strategies can be updated based on new information. As updates are implemented and workers are educated on new procedures, employers may realize they need to make further adjustments.

These employers can look to their workers as an excellent source for measuring the effectiveness of their strategy. Offering suggestion boxes or a hotline where reports of safety concerns can be submitted anonymously can help companies stay ahead of emerging issues. Employers can also meet with supervisors who may have valuable information on what issues are arising. Weekly meetings or toolbox talks can also help employers reinforce ergonomics and other safety training.

Improving workplace ergonomics requires time and often a financial investment in new tools, equipment, and procedures. However, a healthier workforce is more productive and less likely to explore new job opportunities, which improves business in the long term. When an employee doesn't feel they are supported in the workplace and are having difficulty performing their work, they'll often find work that is more suitable. When companies improve ergonomics to make work a little simpler or less taxing, it improves the quality of the workforce and reduces turnover.

When it comes to ergonomics, the most important thing for most construction employers is controlling what you can. Avoid putting workers in positions where they are weakest and more susceptible to tool vibration and static posture or grips. Improving ergonomics in these areas is going to provide the most significant benefits to your business.



## **About the Author**

Shannon Jones is the regional safety manager for Aerotek, covering the states of Arizona, New Mexico, Colorado, Utah, Idaho, and Wyoming. Prior to starting with Aerotek, he worked in physical and occupational medicine, working in physical therapy clinics and on-site in manufacturing plants. He joined Aerotek in the spring of 2022 to add his ergonomic and musculoskeletal expertise to a diverse team of 14 regional safety managers. Visit <u>aerotek.com</u>.

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