

Moving From Ergonomic Objections to Objectives

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- By [Robert Pater](#)

Does your company suffer from soft-tissue and other ergonomic-related injuries? The hallmark of these problems is that they can be insidiously cumulative. These ergonomic-related issues tend to harm people by multiple, gradual exposures, each of which may be below-the-radar of "ow-that-hurts" perception. Most soft-tissue injuries seem to sneak up on a person over time. One moment the worker or manager appears to be just fine and the next, they're in pain after merely a slight done-it-a-thousand-times-with-no-big-deal movement. Or their range of motion or ability to exert strength becomes severely hampered.

Clearly, "invisible" contributors—those we're not aware of—can still affect us. This applies to many forces affecting safety, from odorless gas, unseen radiation, or a stove burner that burns even though it was turned off and because it is no longer glowing or obviously radiating heat. Just like the slowly mounting tensions that accumulate toward soft-tissue injuries, which can be the bane of many companies. But what you see you can adapt to. And what you envision in your mind's eye, you can then include in planning for improving results.

So what to do? One effective leadership approach for dealing with any problem is to first set objectives for improvement. But from my experience, objectives for substantially reducing highly prevalent ergonomic-related injuries often focus on "cutting down" trailing indicators. Overcoming small but potentially dangerous buildups of forces require setting, implementing and monitoring a range of objectives. These then lead to taking the individualized actions needed for a given organization (e.g., from examining and modifying the workplace, engaging employees and motivating them to change, transferring new skills and expertise, and more).

I recommend four ergonomic objectives that can apply to any company member, from workers through Executives, who walks, lifts, pushes, uses tools, pulls, climbs or just sits or stands in place.

1. They take personal control. That is, individuals embrace responsibility for their part in potentially contributing to (notice I didn't write "causing") ergonomics-related injuries. No-brainer, right? After all, most people already want to take control to protect themselves. However, left on their own, we've seen that too often, their preexisting "control" methods exacerbate the problem (such as reflexively over-tensing or trying to "muscle" a load that they're having difficulty moving). They have to be taught best skills that enable them to better "take control."

While staffing levels, equipment design and maintenance, PPE provided, scheduling, machine pacing, and many other factors also can contribute, there's always a human factor that contributing to this mix. Again, I'm strongly against "blaming" workers for own injuries that have a complex of factors; they're rarely, if ever, totally "responsible." But we've found that even in companies where external risks are high (e.g., oil tankers), people have been able to overcome a wide range of ergonomic risks towards achieving stellar safety performance.

2. People think ever more cumulatively. They deeply develop internal awareness of what we call "SCMLD" (Small Changes Can Make Large Differences), where bits of force can lead to wear-down—and, on the prevention side, tiny shifts of attention and alignment and movement can make a world of difference in ability to both harness maximum strength while simultaneously fending off cumulative trauma buildup.

Once they become aware of how outside forces act upon their body, they will better appreciate the value of ergonomic modifications and tools—and they are internally motivated to employ these effectively. Cumulative thinking leads to identifying potential problems at earliest possible level, seeing acorns before they grown into oak trees.

They see internal molehills before these build into soft-tissue damaging mountains, through monitoring themselves for potential small increases in strain, rigidity, or balance being compromised. This includes their becoming more aware of their habits/patterns (being overly right-hand dominant, anyone?) both at work in in off-work hobbies and activities.

3. They become more ergonomically receptive and supportive. As in other arena, involvement and ownership in the process are critical to engagement in an injury prevention process. Focus on supporting workers and managers to express interest in and encourage their company to make further efforts to boost personal ergonomics. They in turn assist co-workers and family members to become more ergonomically aware and effective. Further, they actively participate in ergonomic pilot projects, offer more incisive feedback and have higher expectations of their own, and the company's, ergo performance and culture.

4. They upgrade their own actions. In other words, they make personal ergonomic modifications. These can certainly include PPE (e.g., putting shock-reducing inserts in shoes, switching to ergonomically designed-at-home tools such as lawn mowers and other equipment) but doesn't end there. They remember to employ good ergonomic training they've received, creatively porting these to a wide range of work and personal tasks.

They may also apply the Laws of Motion so that physics works for and not against them. With training, most people can accomplish tasks better while exerting less tension and thereby reduce buildup of extra forces in their body ("for every action there's an equal . . ."). They practice better directing their attention, understanding that where you look often triggers which muscle groups

you use. And they make small adjustments to greatly improve their balance, alignment, position, agility, leverage, breath synchronization, and coordination when team lifting.

Of course, each company has different task exposures, existing facilities, and working environments; workforce composition; potentially available resources; history/experience of reducing soft-tissue and other injuries; and more. Realistically, it's not always possible to shield all potentially harmful energies from entering the body, both during work tasks and especially from at-home activities. But if small forces repetitively or intermittently applied can mount into disabling injuries, it also makes sense plan on re-routing these forces more safely—away from most vulnerable body areas—before they build into wear-down ergonomic injuries.

By envisioning, setting, and monitoring customized ergonomic objectives, organizations have demonstrated they can make significant strides in reducing the incidence and severity of these problems.