

Key Findings from Research:

Title of Report and Authors:

Creating the Climate for Making Ergonomic Changes

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Overview:

The specific goal was to assess current perceptions and attitudes held among construction professionals toward overcoming barriers and obstacles, and voluntarily implementing ergonomic solutions.

This study relates directly to the NORA Construction Sector Strategic Goal #7.6—to improve the acceptance, diffusion and adoption of WMSD workplace solutions by contractors, owners, suppliers and workers, and addresses both goals 7.6.1—evaluating previously implemented work practice innovations, and 7.6.2— pilot studies toward developing dissemination strategies for workplace solutions to evaluate the factors that facilitate and inhibit intervention adoption and diffusion.

Key Findings:

- ***Knowledge and Awareness:*** While there was varying understanding of the very term “ergonomics,” survey participants were fully engaged in addressing the issue, which they saw as having major impact on the construction workforce. Contractors are particularly looking for hard data on cost-effectiveness, to ensure that any solutions not inhibit production and be at a reasonable price. Workers wanted to know how the hazards impact their bodies long-term, and wanted real-world solutions. Unions are looking for hard data that they could use for negotiating, and good training materials for training apprentices and journeymen. All groups felt that different kinds of training would be needed on all levels—including workers, front line supervisors; contractors and project owners, and unions and apprenticeship programs.
- ***Control strategies currently being utilized:*** No pattern emerged to illustrate what’s currently being done on construction worksites to implement ergonomic solutions. While we heard about some use of new tools, changes in how materials are handled, and some attention being paid to job rotation and hazard analysis, the one solution being increasingly adopted and credited with reducing injuries is Stretch and Flex programs at the worksite.
- ***Attitudes:*** Contractors were generally in agreement that they were uninterested in trying any solution that would negatively impact production. Their primary concern was about cost, but they could be motivated by a good “return on investment” argument. They were also concerned about “holding the bag” for cumulative injuries. Unions were in a more reactive position; their primary concern is to keep their members employed, so they’re not likely to fight the contractors for costly ergonomic changes unless their members demand it. The workers are also concerned about being good producers and therefore tend to work through pain, assuming it’s inevitable in the industry. In today’s economy, they also fear losing their job and/or career, or feeling the brunt of peer pressure by complaining.
- ***Obstacles:*** The key obstacles raised are the availability of tested and effective tools, equipment and processes, the pace of production they perceive is needed to keep union contractors competitive, and the expense of purchasing new tools

and implementing other solutions. Contractors would need to be convinced that there was a financial and/or production benefit to adopting any ergonomic innovation. However, they, and the workers, understand that the cost of worker injuries, losing skilled workers, and workers' compensation premiums must be factored in to any cost-benefit analysis. Other obstacles are the repetitive nature of construction work, and a lack of awareness among workers and contractors of the hazards and of available solutions.

- **Messaging:** While contractors top messages had to do with productivity and saving money, workers' and unions' top messages had to do with health, their family, and not being able to afford to get injured; productivity was a close #4. For a campaign to be successful, it would need to address the very different concerns held by contractors and workers.

Conclusions:

Ergonomic solutions exist and are already helping the construction industry protect workers and reduce injuries and there is great potential for further, more widespread application. However, the barriers to implementing more solutions, while not insurmountable, will require the participation and cooperation of all levels of the industry, contractors, unions and workers. Without doubt, construction is tough, repetitive, physically demanding work. For some workers it is these very qualities that attract them to the work. If the principles of ergonomics are integrated into all phases of construction such as, bidding, engineering, pre-planning, purchasing, materials handling, job site management, training of supervisors and workers, we can take the burden off of workers for conditioning their own bodies and can successfully mitigate hazards and reduce, if not eliminate, WMSDs.

For each major obstacle that was outlined in this study, the construction professionals we interviewed offered a variety of solutions. If they can generate ideas while taking a short survey with no preparation, the potential is great for problem solving in a concerted-effort done on a larger scale. This study shows that people know what needs to be done, but they need help in overcoming inertia and facing the juggernaut that is the construction industry. We have already seen positive change in this direction and it is our hope that this study will help in taking the next steps to continue that movement.

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