Case Study: Major Aerospace Manufacturer

The Company

A prominent manufacturer in the aerospace industry was experiencing high rates of musculoskeletal disorders (MSDs) and other injuries caused by ergonomic risk factors and overexertion among its workers.

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The company was struggling to prevent injuries stemming from employees putting strain on their bodies. Pre-program company figures included:

- \$45,000 average cost per claim including direct and indirect costs
- \$300,000 \$500,000 average total annual costs of MSDs across affected employees

The neck and shoulders were the most-affected areas among the employee group. Some injuries originated from employees reaching overhead for long periods of time and lifting or pulling heavy objects in confined spaces. Chronic pain and discomfort had also become problematic, hampering productivity and leading to fatigue, missed work days, and low morale. Other common risks leading to injuries and pain included repetitive movement strain and grasping/gripping/pinching motions that could occur when employees used certain equipment.

The Solution

The aerospace manufacturer contracted with DORN Companies to provide solutions for chronic pain, stress, morale, ergonomic and safety risks over a 4-year period. Interventions primarily targeted the client's production team, manufacturing employees, and supervisors.

Providers offered customized <u>hands-on pain-relief therapies</u> for employees experiencing work-related pain or discomfort, using evidence-based techniques that correspond directly to the job

functions and essential motions of each employee's role.

While on-site at the company's facilities, DORN specialists and ergonomists conducted ERGOLite assessments and job-demand analysis, observing all facets of the work environment to identify risk factors connected to workspaces, equipment, and the work site in general. Pairing pain-relief treatment and ergonomic analysis with preshift mobility and conditioning programs specially designed for

Services Implemented:

- Manual Therapy
- ERGOLite Assessments
- Industrial Athlete Training
- Pre-shift Mobility and Conditioning
- Body Mechanics Training
- Workstation Design Adjustments
- Job Demand Analysis

Program Overview	4-Year Results
Number of people seen	400
Pain level reduction	81%
Stress level reduction	92%
Avoided seeing a workers' compensation doctor	42%
ROI	\$5 for every \$1 invested
Savings / cost avoidance achieved	\$1 Million



the needs of aviation manufacturing workers, the company sought to supplement direct interventions with industrial athlete training, which includes comprehensive body mechanics technique training to improve employees' overall wellness, fitness and safety.

Interventions included workstation design adjustments to better accommodate the varying needs of specific employees. Job rotation analysis was also conducted, leading DORN specialists to recommend new assignment and scheduling practices that better correspond to the physical limitations and risk factors individual to each employee.

Results

Through the 4-year program period, DORN providers and specialists conducted over 2,500 of sessions with over 400 participating employees. After the program, analysis revealed the following results:

- 70.5% decrease in high levels of pain after 4-6 sessions on average
- 81% overall improvement in pain levels
- 92% of employees reported a decrease in stress levels
- · 42% avoided seeing a workers' compensation doctor
- 56% avoided sick days they would have taken without the on-site services
- 30% of participants stopped needing to visit an outside health care professional
- · ROI of \$5 for every \$1 invested
- Total savings: \$1 million + over four years

Additionally, the program helped to decrease overall pain medication usage among participating employees while also boosting morale.

100% of employees in the program reported that the services made it easier for them to do their jobs well.

Employee Feedback

"This program has helped me a lot. My hands feel better, less pain. Thank you so much."

"Phenomenal pain relief services."

"My neck improved and I can work better."



