Ergo ROI: Metrics for Profitability & Productivity

Mitigating Workplace Injuries and Ergonomic Risks at ChevronTexaco

By Kelly Doughty and Kim Lopez

ChevronTexaco is recognized as an employee health and safety leader for its strong safety culture and commitment to minimizing workplace injuries. However, in 2000, corporation data analysis showed a nearly 67% increase in office workstation-related repetitive stress injury (RSI) over the preceding 5 year period (based on Chevron data prior to the merger with Texaco). This rise in injuries existed despite conscientious prevention efforts. In fact, 42% of all injuries were RSIs and 37% of these were among office workers. Thus ChevronTexaco took action.

ChevronTexaco's Revised Injury Risk Approach

ChevronTexaco gave its safety teams a mandate to develop a plan that would decrease the RSI rate to zero. Key stakeholders including medical experts, health and safety professionals, IT staff, ergonomic consultants and leaders from across the organization came together to develop a Repetitive Stress Injury Prevention (RSIP) Plan that would function as policy to move the company towards achieving its zero injury goal.

The ChevronTexaco RSIP Plan required a risk-based approach. This approach called for each office based employee (and contractor) to provide data about his/her work habits and environment through an online risk assessment tool, which in turn calculated relative risk levels. Managers could then use the data and risk information to take action and make decisions about how resources should be allocated. High, medium, and low risk employees were each treated differently, as indicated in the following table (illustrative, not comprehensive):

Factor	Recommended Preventive Measure, Based on Individual Risk Category		
	Low	Medium	High
Training			
Initial Training (Beyond the Risk Assessment and Awareness Tool and local awareness information)	None, although individuals may be included in training for Medium or High Risk category individuals, as appropriate	Applicable Specialized Training, depending on specific risk identified by organization (laptop use, etc.)	Applicable Specialized Training depending on specific risk identified by organization (laptop use, etc.)
Annual Training	Covered by repeating the Risk Assessment	Repeat Risk Assessment plus General Refresher Training (bi-annually), plus risk-specific refresher, as appropriate	Repeat Risk Assessment plus customized training with updated information
Risk-Based Preventive Measures			
Workstation Evaluation	Met by Risk Assessment tool	Evaluation by Qualified Workstation Evaluator	Evaluation by Certified Workstation Evaluator
Special laptop computer accessories (full size keyboard, etc.,) for laptop computer used away from docking station accessories	Available to employee if they choose	Available or required based on extent of use from supervisor/employee discussion	Required
Supervisor/employee discussion	Supervisor monitors Risk Assessment results—discussion is optional	Supervisor/employee discussion of RSI risk factors and needed follow-up actions	Supervisor/employee discussion of RSI risk factors and needed follow-up actions
Preventive referral to Rapid Response	Not available	Not available	Required
Use of break/stretch software	Encouraged	Based on outcome of supervisor/employee discussion	Required
Computer Prescription eyeglasses through Safety Eye Wear Program	Available under existing Safety Eye Wear Program if they choose	Available or required based on outcome of supervisor/employee discussion	Required
Behavioral Safety			
Behavioral Safety Observation Process	Individuals may be included in a computer-focused process, if one exists	Individuals are to be included in a behavioral safety based process if one currently exists at the location, which may require expanding a field-based process to include computer users.	Required, even if a completely new process must be implemented at the location

The primary benefit of a risk-based approach is using the data to focus the application of resources. In this case, data gathered by ChevronTexaco enabled safety managers to:

- Optimize resource use to ensure that expert, hands-on assistance was offered to employees who need it most
- Obtain knowledge about which employees did NOT need attention and resources
- Avoid a "one size fits all" approach (an approach which often drives disengagement)
- Create a corporate risk level benchmark against which progress could be measured
- Conduct trend analyses to modify future plans and programs

Beyond risk assessment, the RSIP Plan required:

- involvement and accountability for supervisors and employees to "manage" and or decrease risk to the best possible degree
- inclusion of contractors, not just employees, in Plan implementation
- employee RSI prevention training and supervisor responsibility training
- behavioral approach to encourage safe work habits including reporting discomfort early
- timely response and resolution follow-through for employees with discomfort, including availability of specialized evaluators
- metric setting with leading indicators and progress monitoring over time

* continuous data information management to ensure reporting accuracy

Remedy Interactive of Sausalito, California developed and delivered the injury prevention software used at ChevronTexaco that has assisted with the majority of Plan elements. The systematic use of technology has allowed ChevronTexaco to increase safety staff efficiency and effectiveness by helping them focus their efforts where they are needed most.

Implementation of the Program

Early in 2001, ChevronTexaco implemented the RSIP Plan across the organization, with a focus on U.S. locations first. Implementation began with an aggressive data collection effort through use of the validated online assessment tool, which determined relative risk levels. To date, data for over 30,000 employees exists. This data is being supplemented through ongoing automated communications, email sent by health and safety staff or supervisors through the System, and manual record updates. During its initial data evaluation, ChevronTexaco discovered that more than 30% of employees who used the tool were high risk.

Leveraging Technology

The technology used by ChevronTexaco empowers employees and supervisors to mitigate risks themselves. One important component of successful risk reduction is the automation of messages to high and moderate risk employees (and their supervisors).

After providing data through the online assessment, each employee receives online office ergonomics training. Employees are then entered into a "feedback loop." Depending on their risk level, they automatically receive ongoing email communications describing their risks as well as remediation recommendations. Supervisors receive copies of the same emails to ensure they remain informed. Regularly, employees are asked to answer additional questions about their work habits and workstation setup. The software application automatically updates each employee's risk profile based on the new data. This gives ChevronTexaco a continually updated corporate ergonomic profile of its employee base.

Allocating Resources to Employees Who Need It Most

Once an employee becomes low risk, he/she receives less attention unless the risk increases to moderate or high levels. Therefore all employees, including low risk workers, are asked to update their profiles at least once per year. Capturing the updated information allows ChevronTexaco to recognize job changes, office moves, and of course, changes in existing environments.

For employees who experience discomfort, ChevronTexaco has implemented a program called Rapid Response. The Rapid Response team consists of highly trained individuals, usually in the field of occupational therapy or physical therapy. This team works closely with high risk individuals, providing more personalized attention to help them reduce discomfort levels.

Key Results and Metrics

ChevronTexaco realized several improvements and cost savings as a result of using a technology-based injury prevention system. The corpo-

ration has measured results in many ways. Success metrics were both outcome-oriented and process-oriented.

Outcome-oriented metrics have been primarily targeted at incident rate reduction as well as workers' compensation costs and claims. At the end of 2003, ChevronTexaco performed an analysis of workers' compensation trends using data collected from more than 6,000 employees. Results were impressive and informative:

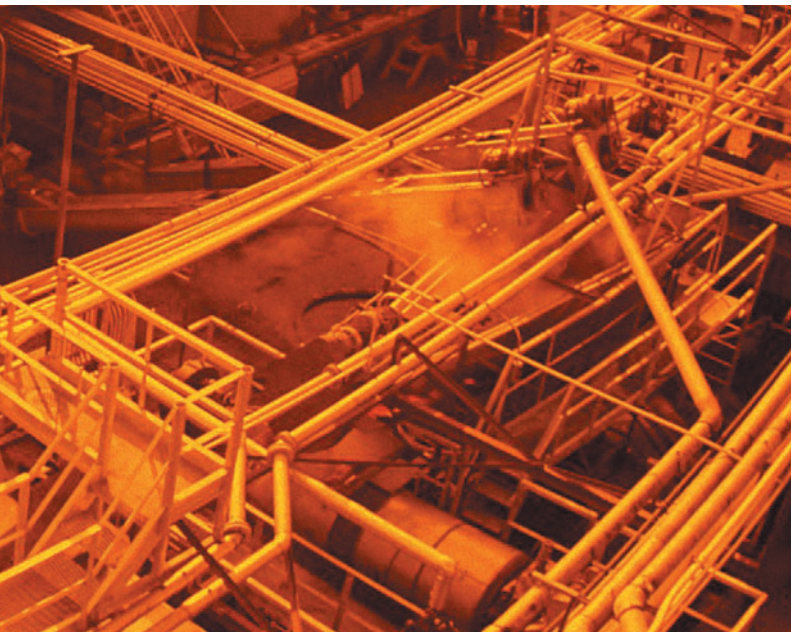
Reduction in Lost Work Days (LWD): Severity, as measured by LWDs, decreased significantly—from 840 in 2000 to 246 in 2002.

Reduction in workers' compensation costs: The average cost per claim, for those who participated in the RSIP program, was at least 40% less than non-participants. For example in one business unit, the average cost per claim decreased from $83,000 to $36,000; in another the average cost per claim decreased from $41,000 to $13,000.

Risk reduction over time: The technology used by ChevronTexaco tracks issues that exist for each employee. Issues that increase an employee's relative risk level are noted, and remediation efforts are suggested to both employees and their supervisors (who often assist in issue resolution). Since rollout in 2001, over 50% of all identified issues (greater than 31,000 issues) have been resolved. This translates into a risk level reduction for over 60% of the population.

Reduction in discomfort levels: ChevronTexaco's safety leaders believe that discomfort is a critical risk indicator. Therefore, one primary effort of the RSIP Plan has been to decrease discomfort levels. At the time of the data analysis (Q4, 2004), 53% of those who initially indicated that they had constant or frequent discomfort, later indicated that they infrequently or never experience discomfort.

Employee participation and satisfaction: Of the numerous process metrics measured at ChevronTexaco, two are of particular importance. Employee participation is necessary for the Plan to have an impact. The program has touched over 35,000 employees and contractors in over 30 countries. And, those "touched" by the Plan are generally satisfied with their experiences. Of those who used the online tool, 94% would recommend the tool to a colleague and 97% rated the user-friendliness of the technology 3 to 5 (on a scale of 1 to 5).



Key Learnings

Program Expectations: Because of variation in resources, cultural differences, and injury severity, it is very challenging to implement one program worldwide, despite benefits of a centralized approach. To address this challenge, ChevronTexaco provided program flexibility through high level RSIP expectations. Organizations are held accountable for meeting these expectations through periodic reviews.

Implementation Plan: The Plan was initially developed as a policy, to be implemented consistently across the company. However, ChevronTexaco came to realize that each organization needed to develop its own implementation plan that fit its local infrastructure and cultural differences. The RSIP Plan, therefore, has come to function as a resource and a guide, rather than a policy.

Manager commitment: Active participation from senior management down through the supervisor level has been essential for success to date and will be needed for ongoing success. Management has demonstrated this commitment through visible and vocal support of the process as well as by allocating personnel and funding to develop and sustain this program.

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