

## The Right Fit

Cut costs and claims, and increase productivity,  
through on-the-job health efforts

BY SARAH ACHENBACH

**David M. Hatrel** knows it takes plenty of muscle to make a safer workplace.

As a physical therapist and president and CEO of Health Connections, the company he founded in 2005, Hatrel regularly consults with companies across all industry segments—from chemical plants and automotive repair shops to oil and gas companies and hospitals.

Hatrel notes that musculoskeletal injuries account for 40 percent of all workers' compensation lost time claims. So his approach to workplace safety is based on identifying risk and ensuring musculoskeletal health and proper fitness levels for the job. He spends time traveling to companies all over the United States—including Dixon—to create programs aimed at reducing workplace injuries, workers' compensation claims and overall musculoskeletal claims. Such efforts also increase productivity and, most importantly, create healthier employees in a cost-effective manner, he points out.

Though workplace injuries have been trending down over the past decade in almost every industry, the cost is trending up because of the severity of injuries. What's to blame? "We cannot ignore that the health of the



employee is directly related to injuries," Hatrel says, citing a 2007 Duke Medical Center study that found that workers with a Body Mass Index (BMI) greater than 30 (classified as obese) filed twice the number of workers' compensation claims as those with a BMI in the recommended range. Obese employees' medical costs were seven times higher, and they lost a staggering 13 times more days from work.

Clearly then, helping employees stay healthy is paramount to workplace safety. Hatrel's tips go way beyond getting the doughnuts out of the break room and are easily adapted—whether for an assembly line or administrative office.

### **Hire Those Who Can Pull Their Weight**

"The most important thing employers can do is know the physical demands of each job," says Hatrel, who is a doctoral candidate in physical therapy at the

University of St. Augustine for Health Sciences in Florida. Hatrel measures the physical tasks required for various jobs, then designs a pre-hire functional screen to measure how well a candidate can do the required work. Those who can't make the cut aren't hired. He recently designed such a screening system with a nursing home of 120 employees that had a 70 percent turnover rate in certified nursing assistants. Lost productivity due to injury came to \$175,000 a year.

"Over the next two calendar years, 50 percent of the people we tested [pre-hire] could not pass and were not hired," he reports. "Turnover went down to less than 20 percent, and they only had one reported injury, with no lost time."

Concludes Hatrel: "If you only hire people physically capable of doing the work, you can drastically cut the number of injuries."

### A Workstation that Works

Repetitive strain injuries abound if workers don't have the right fit with their technological tools and environments. For smaller companies, Hatrel recommends an ergonomic evaluation of each employee's workstation. Larger employers may find it more cost-effective to train a group of employees on ergonomic principles and risk factors (force, repetition, awkward posture, vibration and contact stress). Once a risk factor is identified, "engineer it out," Hatrel urges.

For example, most plants typically store their heaviest items on the floor. "But the heaviest items should be placed mid-thigh or mid-chest, where humans are the strongest," he says.

### Create a Job-Specific Conditioning Program

Hatrel puts employees through a screening similar to that for new hires, with the addition of several standard-

ized fitness tests, then suggests a customized conditioning plan. "You need to tailor an exercise program to what the employee will actually do," he explains. "Some employees can work out on-site. Others can't."

He urges employers to be realistic. "Don't try to create a Cadillac program from day one. Offer fitness-for-work testing on-site and design exercise instruction principally as home-based exercises. As you see more and more people getting involved, move to the next level."

### Try a Little SAS

That's stretching and strengthening. Hatrel suggests identifying "global" risk factors then designing a stretch and strengthening exercise for each one. Consider the worker who spends all day at a grinder, with rounded shoulders and hunched back. His flexibility is reduced and results in weakness in the back of his shoulders, which can lead to

rotator cuff injuries and claims.

Awkward postures can mean frequent breaks to ease sore muscles, absenteeism and high turnover.

Hatrel's Rx: Train several SAS leaders throughout the plant to lead small groups in exercising each morning. Some companies (including Dixon) even opt to offer exercise equipment on-site—and bring in a part-time exercise specialist.

### Butt Out

Smoking drastically reduces the amount of oxygen a cell receives. If an employee has poor lumbar strength, lighting up only makes it worse. "Ten minutes of smoking cuts oxygen levels in the disks of the low back by 50 percent for up to two hours," says Hatrel. "This is akin to putting a plastic bag over your head, pricking a pinhole in it, and then trying to run a marathon." Offering smoking cessation programs at work can have an enormous payoff. ■

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