

THE FUTURE OF ERGONOMICS

# The Three Changing Faces of the U.S. Workforce

These trends will have an impact on ergonomics processes in 2005 and beyond.

by *Kim Lopez*

It's no secret that organizations spend billions of dollars each year on worker's compensation. Rising health care costs, a complex regulatory environment, and soaring premiums have affected the bottom line for many organizations. Regulatory reform may bring some near-term relief, but legal changes won't address some demographic fundamentals.

Your organization will be changing in 2005 and over the next 10 years, as well. More specifically, you will see changes in: 1) the composition of your workforce, 2) the type of work they do, and 3) where they do it. These changes may require your organization to modify its programs and processes in new ways to improve your employees' working environment and health. However, if implemented and managed appropriately, new processes and programs can help reduce your worker's compensation costs and improve employee productivity.

Each of these three workforce changes deserves further exploration because of the important implications it will have on injury prevention programs within your company.

## Changes in the Composition of the Workforce

The graying of the Baby Boomer is a well-known fact. While many baby boomers do plan to retire, a higher percentage hopes to work longer than usual to compensate for insufficient retirement savings, investment losses, or previous bouts of unemployment. In a comprehensive portrait of changes in the American workforce conducted by market research firm Harris Interactive, they found that 33 percent of workers say they expect to retire between the ages of 55 and 64, while 40 percent say they expect to retire between ages 65 and 69. One-fifth plans to work past

the age of 70. (Source: Spherion® Emerging Workforce® Study, 2003)

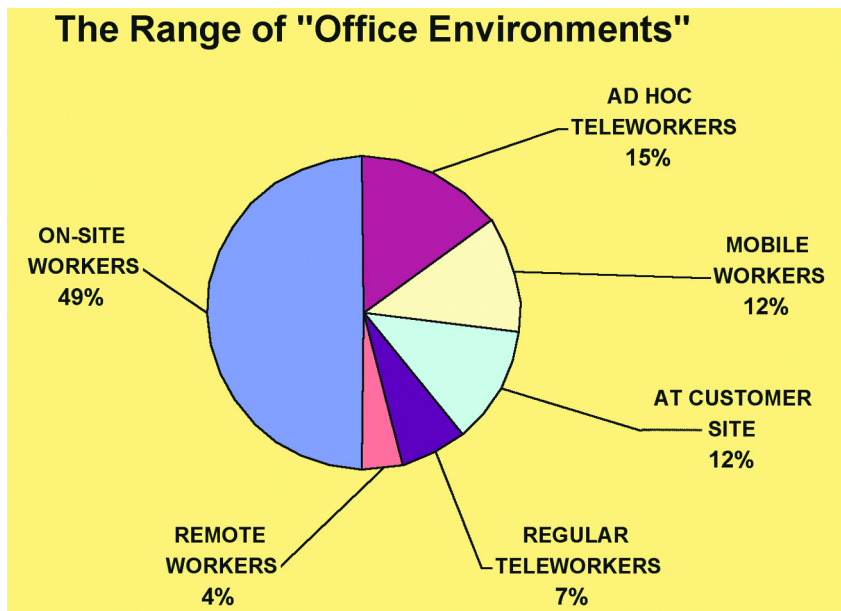
Studies of older workers also typically reveal lower absenteeism and turnover, higher decision quality, and the capability to change and adjust. In most cases, older workers often compensated for their decreasing physical strength by working smarter and being more safety conscious.

The other good news is that older workers get injured less often than younger workers. Researchers often credit more experience and training as factors that keep injury rates down in older workers. However, when older workers do get injured, they take significantly longer to recover. Between the ages of 19 to 29, the average days lost per workplace injury is less than 11. Between the ages of 50 to 59 the average days lost per workplace injury is 47. (Source: Association of Workers' Compensation Boards of Canada,

1999; Canadian Centre for Occupational Health and Safety, 2001; Statistics Canada, 1999)

*Ergonomic implications:* Some employers may be directing a significant portion of injury prevention resources toward younger new hires or employees with fewer years of experience and less training. However, employers may need to adapt their training and injury prevention resources requirements to suit older workers. Research suggests that because some older workers learn from prior experiences, practical training may be more effective than theoretical training.

Increased communication is also critical. Adapting to job-related changes and learning new skills may be easier when new requirements are explained clearly and placed in a broader organizational context. Older workers can certainly adapt and adjust to new requirements, but they may benefit from



more assistance or practice during the transition to new job-related tasks or skills.

In addition, employers should remember to check in with older workers regularly to reinforce safety principles and to understand whether new risks have appeared due to changes in workload, physical relocations, job requirements, or other factors.

## Changes in the Types of Work

The Bureau of Labor Statistics projects total employment will increase by 21.3 million jobs, or 15 percent, between 2002 and 2012. (BLS, U.S. Department of Labor, Feb. 11, 2004) Manufacturing employment in the United States is expected to decline, whereas service-related employment will see significant growth, with nine of the 10 fastest-growing occupations coming from the health care and information technology sectors. A closer look at projected service-sector employment growth shows that more than half of total job growth is expected in two areas: higher-paid/higher-skilled professional occupations, and lower-paid/lower-skilled service occupations.

For service-oriented jobs, the computer is ubiquitous in the workplace. As organizations transfer more business processes online, workers will rely more heavily on using computers to manage those processes, including finance, human resource, customer service, order processing, and billing.

*Ergonomic implications:* Certain workplace injuries, particularly musculoskeletal disorders, are more common in service industries such as health care, information technology, financial services, warehousing and distribution, retail, and biotechnology. As a result, health and safety professionals and risk managers will need to focus on reducing injuries from interacting with computers, rather than from heavy lifting or other manufacturing-related work.

As more processes become computerized, the nature of how employees interact with computers will also become more important. Certain postural behaviors, which are so important in a manufacturing setting, are also relevant for those sitting at desks, typing on keyboards, and looking at monitors for eight hours a day.

Fortunately, risk managers and health and safety staff can communicate new guidelines and approaches to injury prevention to employees who have access to computers by using online programs and directing them to the Internet.

## Where People Work

A study conducted in July 2004 by research firm In-Stat/MDR estimates the number of telecommuters in the United States will increase from 44 million in 2004 to 51 million by 2008. In addition, the American Business Collaboration released a study in 2002 that concentrated on companies with more than 500 employees, which showed only half of the employees work from the same location every day. (See Figure 1) For a risk manager or health and safety professional, the telecommuter population can be challenging to address.

*Ergonomic implications:* When employees work on the road or from home, it reduces or limits the employer's control over a safe work environment. In addition, risk managers and health and safety professionals are less likely to know when changing working conditions may increase risk of injury because they cannot see it for themselves. This means that even if employees are provided with ergonomic workstations or accessories, it is typically not cost-effective to deploy trained staff in remote locations to ensure appropriate adjustments. Also, telecommuters who work at home usually don't take breaks to meet with their colleagues, which increases the likelihood of working on the computer for longer periods of time.

This lack of control in providing a safe and healthy working environment for telecommuters, mobile employees, and employees working in remote locations should particularly concern employers, whose liability extends beyond the four walls of their corporate offices.

## What Organizations Can Do Now

Your organization can proactively address these fundamental changes in the workplace and mitigate the resulting ergonomic implications by following these steps:

1. Develop a solid understanding of

the current risk profile of your employee population.

2. Determine the risk factors driving injuries in your company, including the different types of service and office workers, remote workers, and older workers.

3. Implement proactive ergonomic programs that reduce these risk factors among these populations.

4. Continuously measure and monitor your risk profile against your benchmark risk profile to keep up with new risks due to changes in demographics, workload, operations, and locations.

Consider making modest investments in collecting and managing these data to allow you to see patterns in repetitive injury areas and decreases in productivity with certain worker populations. By having the right information at your fingertips, you can reap the benefits of fewer injuries and lower your worker's compensation costs. Some of these adjustments include:

- *Uniform data gathering and analysis.* While workstation and job analyses provide a certain amount of benchmark data (e.g., an understanding of risk at one point in time), organizations must gather the data consistently across the enterprise so progress can be measured and new risks can be identified.

- *Timely data gathering.* Organizations must gather data regularly across time to keep up with the constant changes in the workforce and the work environment.

- *Communicating new processes and training plans.* Once you have analyzed the data, you must have a plan for responding to and communicating new processes to your employees. Consider what is to be communicated, with whom, and how. Employees should receive communication that empowers them to make changes in their work environment, such as their monitor distance and chair height. ■

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