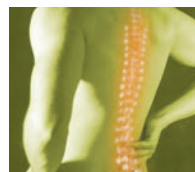


Loss Control

# INSIGHTS



**INSIDE**  
Taking The  
Sting Out Of  
Back Injuries

## Is Your Organization Suffering From **Musculoskeletal Disorders?**



Every year, over 600,000 American workers feel the effect of musculoskeletal disorders (MSDs). They feel it in their lower backs, necks, and shoulders and hands, wrists, and elbows.

But do you know who else suffers from the effects of MSDs — you! According to the Bureau of Labor Statistics, MSDs account for 33 percent of lost day workplace injuries and illnesses. Of even greater concern to employers is the fact that typically MSDs result in longer periods away from the job than do more traumatic injuries. Carpal tunnel syndrome (CTS), for example, results in an average of 32 lost days, while fractures and amputations result in 30 lost days, repetitive motion injuries result in an average 22 lost days, and falls to a lower level result in 15 lost days.

*(continued on inside)*

» **NEW CONSTRUCTION COMPLIANCE MODULE**

OSHA has a new construction module for its Compliance Assistance Quick Start Web Tool. The module introduces businesses to the compliance assistance resources on OSHA's website. Visit [osha.gov](http://osha.gov) for details.

» **PREPARING FOR A PANDEMIC**

How can your company prepare for a pandemic? You'll find the answers in the "Business Pandemic Influenza Checklist" from the Department of Health and Human Services. You can access this checklist at [www.pandemicflu.gov](http://www.pandemicflu.gov)

# Is Your Organization Suffering From Musculoskeletal Disorders?

*(continued from cover)*

From an economic perspective, MSDs account for one out of three dollars spent on workers' compensation, at a cost of approximately \$20 billion per year. In addition, indirect costs, such as those associated with hiring and training replacement workers, can be up to ten times as expensive as direct costs.

The following questions and answers will help you identify some of the causes of MSDs and provide some valuable insight on adjustments you can make to reduce the frequency and severity of these debilitating workplace injuries.

## **Musculoskeletal Disorders (MSDs) —**

A group of conditions that involve the nerves, tendons, muscles, and supporting structures (such as intervertebral discs). They represent a wide range of disorders, which can differ in severity from mild periodic conditions to those which are severe, chronic and debilitating.

### **Q: What MSD risk factors should I be looking for in the work environment?**

**A:** Repetitive, forceful, or prolonged exertions of the hands; frequent or heavy lifting, pushing, pulling, or carrying of heavy objects; prolonged awkward postures; and vibration contribute to MSDs. Jobs or working conditions that combine risk factors increase the risk for developing musculoskeletal problems.

### **Q: What steps can I take to reduce MSDs?**

**A:** According to the National Institute for Occupational Safety and Health, a three-tiered hierarchy of controls is widely accepted as an intervention strategy for controlling MSDs. The three tiers are as follows:

- Reducing or eliminating potentially hazardous conditions using engineering controls
- Changing work practices and management policies (administrative controls)
- Using personal equipment

## **Report Reveals The Real Cause Of Carpal Tunnel Syndrome**

Think computer use causes carpal tunnel syndrome? Think again. According to a Harvard Medical School study, carpal tunnel syndrome may occur because of heredity, body weight, fracture, or even pregnancy.

Recent research has found that heavy computer use — up to seven hours a day — does not increase risk for carpal tunnel syndrome. However, improper computer use and other workplace conditions can contribute to a type of disorder known as repetitive stress injury. Carpal tunnel syndrome is not a repetitive stress injury, though it is often incorrectly described as one, states the Harvard report.

*[Courtesy of Occupational Health & Safety]*

## » NIGHTTIME HEARTBURN'S IMPACT ON PRODUCTIVITY

According to a recent study in the *American Journal of Gastroenterology*, U.S. workers who frequently suffer from nighttime heartburn symptoms cost the U.S. economy more than \$1.9 billion per week in paid hours

or lost productivity. To learn more about heartburn and its effect on workers, visit [www.acg.gi.org/patients.gerd](http://www.acg.gi.org/patients.gerd).

### Q: What type of engineering controls are recommended?

**A:** The preferred approach to prevent and control MSDs is to consider the capabilities and limitations of the workforce when designing workstation layout, selection and use of tools, and work methods. A good match (meaning that the job demands minimize undue stress and strain to the working population as a whole) helps ensure a safe work situation. On the other hand, the presence of MSD risk factors represents departures from this goal and would indicate the need for control measures.

### Q: What type of administrative controls are recommended?

**A:** Administrative controls are management-dictated work practices and policies to reduce or eliminate exposures to ergonomic risk factors. Administrative control strategies include changes in job procedures, such as scheduling more rest breaks, rotating workers through jobs that are physically tiring, and training workers to recognize ergonomic risk factors and to learn techniques for reducing stress and strain while performing their work tasks.

### Q: How can personal protection equipment reduce MSDs?

**A:** Personal protection equipment (PPE) generally provides a barrier between the worker and the hazard source. Gloves are an example of an ergonomic PPE.

### Q: Does my company need an ergonomics program?

**A:** YES! The extent of the program that's appropriate for your organization depends on the exposures your employees face. Some signs that may indicate the need for a more formal program include:

- Company OSHA Form 300 logs or workers' compensation claims show cases of MSDs
- Worker complaints of undue strain, fatigue, pain or discomfort that does not go away after a night of rest
- Workers making frequent trips to medical professionals due to physical aches and pains
- High turnover in certain departments and positions
- Jobs that involve repetitive and forceful exertions; frequent, heavy or overhead lifts; awkward work positions; temperature extremes; or use of vibrating equipment
- Cases of MSDs found among similar businesses in the industry

### Q: Who can I count on to help reduce the likelihood of MSDs in my workplace?

**A:** Simple, *Count on EMC*. This issue of *Loss Control Insights* is packed with helpful tips. Even more information is available online at [emcinsurance.com](http://emcinsurance.com) or from an EMC risk improvement professional.

### Who Is Most Likely To Develop Repetitive Strain Injury?

According to a new study from Canada's Institute for Work and Health, female college graduates employed in a full-time job are most likely to develop repetitive strain injury such as wrist tendonitis or certain kinds of lower back pain.

The most common type of repetitive strain injury identified in the study were in the wrist or hand (37%), shoulder or upper arm (20%), elbow or lower arm (15%) and lower back (11%).

The report concluded that while there are programs in place to prevent repetitive stress injury, more attention needs to be focused on convincing employers to take action to prevent work-related repetitive strain injury.

[Courtesy of Occupational Health & Safety]

# Good News And Bad News About Workplace Injuries



## Ergonomic Assessments

Ergonomics is an applied science designed to improve the overall safety, quality and productivity of the workplace.

EMC Loss Control Engineer Chris Murphy suggests using EMC's online resources to help identify ergonomic problems in your workplace and implement the necessary changes to eliminate those situations.

The following EMC resources will help you complete an ergonomic assessment:

- **EMC's Loss Prevention Information Manual** — Available online, this manual contains three sections that will help guide you through the assessment process: Ergonomics Programs, Materials Handling and Job Hazard Analysis.
- **EMC Tech Sheets** — There are three tech sheets available online that deal with ergonomics.
- **EMC Safety Videos** — Several videos addressing ergonomics are available free of charge to insureds.

### First The Good News:

#### Workplace Injury And Illness Rates Are Down

A total of 4.3 million injuries and illnesses were reported in private industry during 2004 (latest data available), down from 4.4 million in 2003. These cases occurred at a rate of 4.8 cases per 100 equivalent full-time workers, according to the Survey of Occupational Injuries and Illnesses by the Bureau of Labor Statistics. This was a decline from the rate of 5.0 cases per 100 equivalent full-time workers reported by the Bureau for 2003 and resulted from a 2.5 percent decrease in the number of cases reported combined with a 1.6 percent increase in the number of hours worked.

Goods-producing industries as a whole had an injury and illness rate of 6.5 cases per 100 equivalent full-time workers, while service-producing industries as a whole had a rate of 4.2 cases per 100 equivalent full-time workers. Both of these rates declined by 0.2 cases per 100 equivalent full-time workers from the rates reported for 2003. Among all private industry sectors, only the utilities sector experienced a significant increase in the injury and illness rate, rising from 4.4 cases per 100 equivalent full-time workers in 2003 to 5.2 cases in 2004.

### Now For The Bad News:

#### Workplace Injuries Remain Costly To Employers

While employers have implemented programs to cut the number of workplace injuries, accidents continue to impact the financial performance of organizations throughout the country. Although a recent national study revealed that the rate of growth in the cost of the most serious workplace injuries slowed significantly, the financial impact of those injuries remains a problem. In 2003, for example, employers spent \$50.8 billion on wage payments and medical care for workers hurt on the job.

What type of injury has the greatest financial impact? According to this study, overexertion represented 26.4 percent of total reported injuries, costing employers \$13.4 billion. Other costly injuries included falls on the same level, representing 13.7 percent of injuries at a cost of \$6.9 billion; bodily reaction injuries, representing 10.2 percent at a cost of \$5.1 billion; and falls to a lower level, representing 9.0 percent of reported losses, costing employers \$4.6 billion.

### More Good News:

#### EMC Is Here To Help You Control Workplace Injuries

Managing risk is imperative to reducing losses and controlling costs. EMC can help your business prevent many losses from occurring. Since 1926, EMC Insurance Companies has provided policyholders with expert evaluation, technical expertise and effective loss control solutions. Today, with the support of leading-edge technologies, we have one of the most sophisticated loss control teams in the insurance industry, offering the following services aimed at reducing the frequency and severity of workplace injuries and illnesses: environmental health, ergonomics, facility planning and material handling analysis, partnership service, compliance benchmark surveys, policyholder online services, and designated preferred physician programs. To learn about the many ways you can *Count on EMC* to reduce the impact of work-related musculoskeletal disorders, visit the Loss Control section at [emcinsurance.com](http://emcinsurance.com).

# Taking The Sting Out Of Back Injuries



What body part is the most frequently affected by workplace injuries? According to the Bureau of Labor Statistics, more than one million workers suffer back injuries each year, and back injuries account for one of every five workplace injuries or illnesses. The financial impact is just as alarming. One-fourth of all compensation indemnity claims involve back injuries, costing American industries billions of dollars.

## Lifting Is The Culprit. Effective Controls Are The Answer.

Although no approach has been found for totally eliminating back injuries caused by lifting (the major cause of injuries to the lower back), a substantial portion can be prevented by implementing the following controls:

- Installation of mechanical aids such as pneumatic lifts, conveyors and/or automated materials handling equipment
- A reduction in the size or weight of the object lifted

### BACK INJURIES BY THE NUMBERS:

#### IN THE WORKPLACE, 2003 BY SEX:\*

Men 194,750    Women 107,950

#### BY LENGTH OF SERVICE WITH EMPLOYER:\*

Less than 3 months	32,860
3 months to 11 months	63,760
<b>1 year to 5 years</b>	<b>113,840</b>
More than five years	91,250

#### BY TIME OF DAY:\*

12:01 a.m. to 8 a.m.	44,690
<b>8:01 a.m. to 12 p.m.</b>	<b>91,790</b>
12:01 p.m. to 4 p.m.	63,650
4:01 p.m. to 8 p.m.	29,990
8:01 p.m. to 12 a.m.	17,290

\* National Safety Council, 2005

- Adjusting the height of a pallet or shelf to avoid strenuous lifting which occurs below knee height or above shoulder height
- Training employees to utilize lifting techniques that place minimum stress on the lower back
- Physical conditioning or stretching programs to reduce the risk of muscle strain
- Strength testing of workers can prevent up to one-third of work-related injuries by discouraging the assignment of workers to jobs that exceed their strength capabilities

### Count On EMC To Help You Reduce Back Injuries

You can learn more about reducing back injuries by logging in to [emcinsurance.com](http://emcinsurance.com). Click **loss control** for access to videos, technical manuals and other resources that can help train your employees about safe lifting and other techniques to reduce the likelihood of back injuries and other MSDs.

## TEN TIPS FOR SAFER LIFTING

The following safe lifting principles from the Washington State Department of Labor can reduce the risk of back injury.

- 1 Size up the load, making certain you can lift it safely.
- 2 Get as close to the load as possible before lifting.
- 3 Keep the load as close to your body as possible.
- 4 Make sure your footing is secure.
- 5 Do not twist while lifting.
- 6 Lift smoothly and slowly.
- 7 Organize the work to avoid lifting from the floor or above shoulder level.
- 8 If you have a lot of lifting to do during the day, try not to do it all at once.
- 9 Use the same principles when lowering or placing the load after lifting.
- 10 Try to avoid carrying a load more than 10 feet without getting mechanical assistance.

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## Who Is Most Likely To Suffer A Back Injury?

Not all jobs are created equal when it comes to the risk of work-related back pain and injury. Members of the American Chiropractic Association (ACA) rated the jobs they considered to be most “back-breaking:”

- 1. Heavy truck and tractor-trailer drivers**
- 2. Construction workers**
- 3. Landscapers**
- 4. Police officers**
- 5. Farmers**
- 6. Shingle roofers**
- 7. Firefighters/EMTs**
- 8. Delivery drivers**
- 9. Nursing home workers**
- 10. Auto mechanics**

The ACA suggests the following to limit back strain:

- Maintain proper posture
- Wear comfortable, low-heeled shoes
- Alternate tasks that use different muscle groups
- Take periodic stretch breaks
- Lift with the knees, keep the object close to the body, and do not twist when lifting



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*Loss Control Insights* is also available online at [www.emcinsurance.com](http://www.emcinsurance.com).