Think your technology and life science firm’s employees aren’t likely to get injured on the job? Think again. More than half of all workplace injuries are related to musculoskeletal disorders (MSDs) — musculo-skeletal injuries that are common among those who engage in such repetitive motion activities as typing on a computer keyboard or working on a manufacturing assembly line.

Long days hunched over keyboards, or on the assembly line endlessly snapping in the same part, can lead to cumulative trauma disorders (CTDs) and lower back ailments. In fact, nearly 60 percent of employees doing computer work say they have wrist pain. Here are some other common complaints:

- **Muscle fatigue or pain.** Working for long periods in the same position or in awkward positions can put stress on hands and wrists and lead to injury.
- **Eye strain.** Sitting too close to — or prolonged gazing at — a monitor can reduce eye blinking and may lead to dry or aching eyes.
- **Lower back pain.** Using laptops or non-adjustable office furniture can cause employees to work at awkward angles, and lead to back stress.

Several trends make CTDs a special concern for technology and life science firms. First, so many employees in the industry use computers. Many of these same people also sit down at the computer at home, to surf the Internet. Second, specialized jobs are increasing every day. This means more people are doing the same thing all day. Finally, people are living longer.

Not only can these disorders take a major toll on the body, they can have a significant impact on your business. In 2003, the average medical claim associated with a CTD was over $43,000. And that doesn’t even include the hidden costs for employers of lost productivity when an employee is disabled or the cost of hiring and training a replacement worker.

What’s a business to do? Ergonomics, or the process of safely and comfortably relating workers to their workspaces, can help. For instance, the Centers for Disease Control and Prevention suggests: leaving enough room for range of motion; adjusting desk chairs to individuals; positioning monitors so eye level is at the top of the screen; and finding a pointing device, such as a mouse, stylus or tablet, suited to the individual.

There are many other simple things employers can consider to help protect their workers and their pocketbooks. For example:

- Stress the importance of good posture at the computer.
- Use smart lifting techniques and tools that can make the job easier.
- Appoint someone on your staff to take responsibility for safety issues. Have this person research ergonomics best practices, review resources provided by your workers’ compensation insurance company, train employees, and make changes to workspaces as needed.

Among workers’ compensation injuries, cumulative trauma disorders are the fastest growing, with claims averaging over $43,000 apiece.

Source: MostChoice.com
Common sense measures can go a long way to preventing these types of injuries. Adjust workstations, take advantage of training, see what other equipment is available. You may not prevent every CTD, but you can take actions that will help prevent problems.

How to Set Up Ergonomically Correct Workstations

Work-related musculoskeletal disorders such as back injuries and repetitive motion injuries are the most prevalent among programmers, engineers, Web designers and technical writers.

They are, however, preventable — just by making adjustments to their workstations. To the right is a handy diagram that illustrates the proper positioning and components in an employee’s workstation.

Keeping an Eye on Avoiding Eye Strain

For professionals in your industry — whether sitting in front of a computer or standing in an assembly line — eye strain can be a major factor in workplace discomfort as well as a drain on employee productivity.

According to specialists in The Hartford’s Loss Control Department, eye strain in the workplace can be caused by several factors, including:

- inappropriate lighting levels;
- difficult viewing distances and angles;
- poor contrast between the foreground and background colors on a computer screen;
- small print or font sizes;
- long periods of visual attention; and
- incorrect height of monitor.

So what can you do to alleviate eye discomfort your employees may experience?

1. **Match lighting to job functions.**
   - More light is required for reading, writing, and fine motor tasks such as small component assembly or computer work.

2. **Assess overhead lights.**
   - Use filters to diffuse overhead lights where ambient lighting level is too high.
   - Comply with the recommended ambient lighting level of 300-500 lux* for computer operations. Provide task lighting for non-computer, clerical operations.

3. **Evaluate windows and walls.**
   - Cover windows with blinds and use matte finishes on walls, floors and furniture, to reduce glare.

Seeing things in a good light

Inappropriate levels of light in workspaces are not good for employees — or business. So make sure your employees are always in a good light.

<table>
<thead>
<tr>
<th>Office Situation</th>
<th>Recommended Lighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient lighting for computers</td>
<td>30-50 foot-candles*</td>
</tr>
<tr>
<td>Task lighting for reading or writing</td>
<td>75 foot-candles*</td>
</tr>
</tbody>
</table>

*Lighting levels are measured in lux or foot-candles; 1 lux = .0929 foot-candles.
4. Adjust computer screens.
   • Adjust the brightness and contrast according to an individual's preference, and set a light color for the background on the screen.
   • Place the monitor parallel with (not directly below) overhead lights.
   • Angle the monitor away from light sources.
   • Make sure that task lamps illuminate the document — not the monitor.

Experts also suggest that workers who work on a computer for long periods should look away from the screen for a few seconds about every 20-30 minutes — and blink a few times — to keep eyes from drying out.

Avoid Back Strain with Proper Lifting Techniques
Although computers are getting smaller, lifting them — or other equipment — can still take its toll on even the fittest employee.

For many businesses, back injury prevention is a major safety issue. The Bureau of Labor Statistics (BLS) reports that:
   • over one million workers suffer back injuries each year; and
   • back injuries account for one out of every five workplace injuries and illnesses.

Perhaps even more startling is that back problems have become the second biggest reason for missed work, costing about $30 to $80 billion a year including the cost of lost productivity.*

With exposures like this, it’s wise to advise workers who are responsible for routinely lifting, moving and hauling equipment on proper lifting techniques. One of the best preventative measures for back injuries is employee training that includes these dos and don’ts.

Not only can back injury prevention help protect your employees, it may also be an excellent investment of your time and resources. Want more helpful tips to share with your employees? The Hartford offers several training tools including a Back Injury Prevention video that addresses many common problems.

For More Information
For more information on how to manage risks for your business, contact your local Hartford agent, or visit www.thehartford.com.

Best Practices for Your Business

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*Source: ergoboy.com

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