



# City Safe

A Guide To Assist In Training  
Employees About:

Jan./Feb.  
2003

## Ergonomic Injuries

Number 8

### Inside this issue. . .

Introduction to Good Ergonomics	Page 2, 3, & 4
Helpful Ergonomic Tips	Page 4
Ergonomic Injuries Quiz	Page 5
Payroll Audit Notice	Page 6

*Kansas Municipal Insurance Trust  
Board of Trustees & Key Contacts*

Gary Hobbie - President  
Russell

Kelly DeMeritt - Vice President  
Atchison

Carol Eddington - Treasurer  
Oswego

Ron Pickman -  
Immediate Past President  
Goodland

David Alfaro                      Nancy Calkins  
Augusta                              Mission

Keith DeHaven                  Willis Heck  
Sedgwick                              Newton

Cheryl Lanoue                  Howard Partington  
Concordia                              Great Bend

Rhonda Schuetz  
Hiawatha

Don Moler  
LKM Executive Director  
Ex-Officio

Don Osenbaugh  
Pool Administrator

Bret Glendening                  Wendy Flowers  
KMIT Agent                      Admin. Assistant  
Co-Editor                              Co-Editor

Denise Humphrey  
Bookkeeper

*City Safe is a publication of the League of Kansas Municipalities and the Kansas Municipal Insurance Trust for the purpose of educating and informing cities about loss control methods and risk management. Contents herein are not intended to provide specific legal or medical advice. Readers should seek advice on specific concerns from a qualified professional.*

*Kansas Municipal Insurance Trust  
300 SW 8th Avenue  
Topeka, KS 66603  
Phone: (785) 354-9565  
Fax: (785) 354-4186  
wflowers@networksplus.net*

## Use Good Ergonomics to Avoid Injury

Poor Ergonomics = a task or tool that exposes you to frequent:

- Repetitive motions on a machine, keyboard, packing, cutting, etc.
- Forceful exertion of your arm or hand
- Vibration
- Awkward positions or movements

Good Ergonomics = a task or tool that:

- Minimizes repetitive motions
- Alternates repetitive motions with other tasks
- Positions the work surface waist high
- Places tools and materials within a 20 inch reach
- Uses a chair with adjustable height and back support
- Positions a computer keyboard for work with wrists straight, elbows at right angles, and arms resting at sides
- Has light, easy grip tools that don't require extreme effort
- Grips tools so the thumb and index finger overlap slightly
- Avoids bending wrists
- Holds materials with clamps or jigs
- Carries materials with a palm-down grip
- Operates vibrating tools at the lowest efficient speed and the loosest safe grip

Ergonomics is about working well. "Well" refers to both physical well-being and good performance. Working in pain will have a negative effect on your productivity and efficiency, not to mention your health and well-being. The goal of applying ergonomics in the work place is to help you to work better, and in doing so, to stay healthy.

While working, keep the following in mind:

- The natural curves in the spine - maintain the lumbar curve when sitting, standing, lifting, pushing, or pulling.
- Your head upright and looking forward - no tilting to the side, forward, or looking to the side.

- Arms close to the sides of your body - holding your arms up strains the neck, shoulder, and upper back muscles.
- Wrists flat and straight - keep the tendons working in a straight line.
- Power grips instead of pinch grips - use the full hand, not just the finger tips to generate force.
- Avoid kneeling - our knees were designed for vertical load bearing. Keep your feet below your knees and your knees below your hips.
- Good footwear - shock absorbing footwear and good arch supports will keep you mobile and give you a good base of support.

In an ideal world, every workplace would consider ergonomics a priority. There are two key issues involved in applying ergonomics in the work place: Education & Evaluation.

### **Education**

To help workers take responsibility for their own well-being, they must be informed. Workers who understand correct working postures and principles of ergonomics can make insightful suggestions on improving work practices, processes, and environments. This training should include information about correct postures, potential injuries, and methods of improving work spaces to facilitate correct postures.

### **Evaluation**

Whether you have already had injuries in your workplace or you are planning to prevent potential injuries, you need to evaluate the existing equipment, postures, and processes. This could be done by an ergonomics team composed of workers, safety professionals, and management. When the issues and concerns have been identified and documented, you will be able to see the effectiveness of the changes you make.

### **Injury Prevention Strategies**

The best way to prevent injury is to stop and think: "Is there a better way to do this job?"



- Keep the curves in the spine.
- Work at the correct height.
- Keep wrists flat and straight.
- Reduce repetition.
- Keep arms down and shoulders relaxed.
- Protect against cold and heat.
- Keep head upright and looking forward.
- Pad pressure points.
- Use a power grip.
- Reduce vibration exposure.
- Improve grip - ability of tools.
- Use the correct tool for the task.
- Decrease loads that are lifted, carried, pushed, or pulled.

## Good Ergonomics Means Listening to Your Body

Numbness, pain, and other symptoms mean you're forcing your body to do something it wasn't meant to do. Look for ways to reorganize your work to avoid ergonomic injuries.

### Test Your Knowledge

Have your employees take the following ergonomic injuries quiz. By testing their knowledge, you can judge their understanding of how to prevent these accidents and whether you need to review this important topic again soon.



## Helpful Ergonomic Tips

### Kneeling Can Make Lifting Less Dangerous

Think about how your employees would lift a bulky container off the floor. Many workers would simply reach over and pick it up. Obviously, this is a very dangerous practice. Reaching and bending while lifting is a sure way to wind up with back pain.

A better idea is to teach workers to kneel first. This brings the worker closer to the load and allows the worker's legs to support part of the item's weight. While kneeling, workers can slide or lift the item onto their knee and get it close to their bodies before lifting it all the way up. With the item on their knee, they can better "hug" the item and avoid much of the dangerous reaching and bending.

### Four Steps To A Healthier Neck

You probably see people do it all the time: After spending long hours staring at a computer screen, people move their necks from side to side in an effort to stretch them out. It is normal to want to stretch your muscles after they have remained in the same position for a long pe-

riod of time. This is the reason why you stretch when you first wake in the morning.

Stretching the neck can be very beneficial for those who work at computer terminals, but you can help them get the most out of those stretch breaks. Teach workers to follow this simple procedure for performing a simple neck stretch:

1. Tilt your head toward the right shoulder.
2. Then, tilt your head toward the left shoulder.
3. Turn your head from side to side.
4. Do not stick your head out, keep it aligned.

### Why Two Hands Are Better Than One

No matter what the tasks are, a good rule to follow is to use two hands whenever possible. Using two hands to perform a task allows you to spread the load out more evenly than when only one hand is used. Your individual muscles do not need to work as hard.

Even if the situation only calls for moving a light object or performing some other small task, using two hands will reduce the amount of strain the task puts on your muscles.

# Ergonomic Injuries Quiz

1. Good ergonomics:
  - a. Adapts the job to the person
  - b. Forces the person to fit the job
  - c. Causes musculoskeletal disorders
2. Musculoskeletal disorders may result from the repetitive motions or:
  - a. Forceful exertion
  - b. Awkward positions or movements
  - c. Both a and b
3. Carpal tunnel syndrome occurs when the nerve in the wrist's carpal tunnel is pinched.
  - a. True
  - b. False
4. An ergonomic work surface is positioned at:
  - a. A 20-inch reach
  - b. Waist height
  - c. Shoulder height
5. The tools and materials you use should be within a:
  - a. 20-inch reach
  - b. 6-inch reach
  - c. Longest possible reach
6. An ergonomic tool is lightweight, doesn't require extreme effort, and:
  - a. Is custom-designed
  - b. Is easy to grip
  - c. Can be gripped with one finger
7. The ergonomic way to carry objects is with:
  - a. Palm-up grip
  - b. Palm-down grip
  - c. Finger grip
8. Good ergonomics with vibrating tools includes:
  - a. Operating them at the lowest efficient speed
  - b. Using them only on cold days
  - c. Gripping them as tightly as possible
9. To prevent long-term ergonomic injuries, you should immediately report when your arm, hand, or other upper parts experiences:
  - a. Cold
  - b. Pain, numbness, or tingling
  - c. Comfort
10. To prevent ergonomic injuries, it's best to keep your hands:
  - a. Warm
  - b. Cold
  - c. Wet



**Answers to ergonomic injuries quiz:**  
1. a  
2. c  
3. a  
4. b  
5. a  
6. b  
7. a  
8. a  
9. b  
10. a

---

## IMPORTANT—Payroll Audit Notice

The KMIT payroll auditors, from **ChoicePoint**, will soon be contacting each member city. Actual payrolls for 2002 will be audited. PLEASE help the Pool by scheduling your auditor as quickly as possible. The payroll audit is the first step in a series of tasks that KMIT is required by law to do. Delay of completion of the audits can lead to significant compliance issues for KMIT, and **ALL AUDITS** must be done before the next step in the process can occur. About ½ of all KMIT members will be audited by phone; the other ½ must be on-site “desk” audits. The auditors will not need much time in your office if your staff spends just a bit of advance time in preparation. This is **IMPORTANT**, and your cooperation and patience is greatly appreciated. As always, please call or email KMIT with any questions about this process.

---

### **Kansas Municipal Insurance Trust**

300 SW 8th Avenue  
Topeka, KS 66603