



City Safe

A Guide To Assist In Training
Employees About:

July/
August
2009

Number 46

Reducing KMIT Cities’ #1 Cause of Injuries - STRAINS

*For Upper Extremity, Neck
Flexibility and Low Back Exercises, see
this month’s City Safe folder online at
www.kmit.net in
KMIT’s Document Center!
A must do to help reduce strains
in your department!*

Inside this issue. . .

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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.

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Note from the KMIT Staff...

Safety matters to us when it comes to the health of city employees. You may recall in the last issue of City Safe, we identified the top two injury claims relating to KMIT member cities during 2009, with a breakdown of work comp claims—specific to accident type for 2009, year-to-date.

The top two claims were caused by 1) strains, and 2) falling or slipping (see graph on page 5). This issue will heighten awareness and focus on how to reduce or avoid the number one cause of claims, which is strains. During 2005-2009, KMIT-insured city employees logged more than 970 strain injuries. The cost associated with treating those injuries was nearly \$5.5 million.

Attached to this electronic distribution of City Safe, is a supplemental Introduction to Stretching, as well as stretches for low back, upper extremity and neck flexibility. These supplements can be downloaded and printed for your use during safety training meetings, or better yet—to be used as guides during daily stretching exercises. They are located on the KMIT website under the July-August issue of City Safe by entering the Document Center.

July and August are always appropriate times to remind everyone about the importance of avoiding heat stress. Please take a moment to see page 8 for a quick guide that can be photocopied and distributed to your city's various departments. These tips are applicable to all of us, whether at or away from work.

Specifics in this issue of City Safe were obtained from IMA's Renee Rhodes, and her vast toolbox of safety information. A full array of information is available for your use at www.kmit.net under Loss Prevention Training Tools, in the Document Center. Be sure to check it out!

As always, KMIT encourages the distribution of City Safe to every department within your city, as well to incorporate suggestions provided within. Constant reminders to keep safety in the forefront of everyone's mind is of paramount importance to all of us.

Have a safe day!

*Sincerely,
The KMIT Staff*

Objective:

To emphasize the types of injuries associated with strains and heighten awareness of how to avoid/reduce strains.

Introduction:

Musculoskeletal Disorders (MSDs) are injuries and disorders of the muscles, nerves, tendons, ligaments, joints, cartilage and spinal discs. The symptoms of MSDs can include a dull aching sensation, discomfort with specific movements, tenderness to the touch, a burning sensation, pain, tingling, cramping or stiffness. Symptoms often appear gradually and may disappear during rest. The most common problems occur in a person's neck, low back, shoulders, elbow, wrists and hands.

Primary Risk Factors

When we are aware of motions or movements that might cause problems, we can take steps to avoid doing something that might develop into a MSD. The four primary risk factors for MSDs include:

- Awkward postures
- Using excessive force
- Repetitive motions
- Contact stress



Maintaining Flexibility

One of the contributing factors to strains is moving our body or muscle groups before they have been 'warmed up' for work. There is real value in practicing some basic stretching exercises to prepare our bodies for work.

Simple stretching exercises for our hands and wrists, back and neck can be stretched gently from side to side and then from front to back. Your back can be stretched while sitting in a chair and bending forward so your chin gets close to your knees. Not only should you stretch when you begin work, but take mini stretch breaks throughout the day.

Lifting Techniques

How we lift and use our back will determine if we experience pain, and troubles that we can avoid. Improper lifting will result in strains and pain. By following these lifting tips, you can avoid being hurt and having pain. No one can force you to lift the right way; you have to decide to do the right thing every time you lift.

Your Own Personal Equipment Safety...
Is Your Body Ready For Your Job?
The body is like any other equipment used in your workplace. It must be maintained and tuned so it is ready to respond when you need it. Consistent stretching and exercise will help reduce work-related injuries.

First, when lifting, size up what is going to be lifted. If the object is too awkward, too big, or too heavy, get some help. Many times, people have lifted items that were too big and the results were painful.

Second, always lift with your legs and never with your back. Most of us still lift freestyle (lifting with our backs instead of our legs) because it is easier. Our leg muscles are designed to lift loads. Our backs are not set up that way. When lifting, don't bend at your waist; bend with your knees. Lifting with your waist will cause lower back injuries.

Third, when lifting, avoid lifting and twisting all in the same motion. Your first goal is to get what you are lifting up and then, once your legs are straight, you can move your legs instead of twisting your waist and lower back.

Rules of Good Lifting

If you follow these rules for lifting, you will reduce the possibility of injury:

- Bend the knees while lifting - let your legs do the work.
- Lift straight up in a smooth motion.
- Do not twist or turn your body once the lift is made.
- Set the load down properly.
- Always push a load that is on a cart - never pull it.
- If the object that you are handling is long, get some help.
- Split the load into smaller loads if possible.
- Place feet close to the object and center yourself over the load.
- Size up the load before lifting - test by moving a corner or pushing the load.
- Make sure there is a clear path - don't fall over something you can't see.



The last point is really the most important. If you look where you're going, you're more likely to get there in one piece. One more thing: Sometimes, even when you're careful, you can fall. But you can still try to keep from being injured seriously by "falling correctly." There are two ways to do it: One way is to roll with the fall. The other is to bend your elbows and knees, so your legs and arms absorb the fall. If you do fall, it's a good idea to get medical attention. You can't always tell if something has been torn, sprained or broken.

KMIT Facts About Strain Injuries, 2005 - Present
Actual Cost of Claims = \$5,518,26 - Listed by Category

- Repetitive Motion - \$479,713
- Robbery/Assault - \$56,472
- Stepping - \$89,350
- Strain by Various - \$4,892,727

(Injuries under various range from lifting trash cans, logs, or boxes to pulling hard on a wrench, participating in a training exercise, pulling a vehicle from snow, etc.)

Twisting, Reaching, Sideways Bending, Unequal Lifting

How we lift is very important, but there are other factors that cause strains, and they involved twisting and reaching. Any amount of twisting, reaching or bending while lifting causes more stress on the back. Here are some points to consider:

- Reach upward: This usually causes the back to arch and increases the forces on the lower spine. It also puts stress on the upper back, shoulders and arms.
- Forward reaches: Reaching beyond the length of your arm puts a lot of stress on your lower back.
- Bending and twisting concerns: Bending sideways or twisting your trunk puts stress on your lower back and increases the possibility of a lower back strain.
- Lift straight up in a smooth motion.

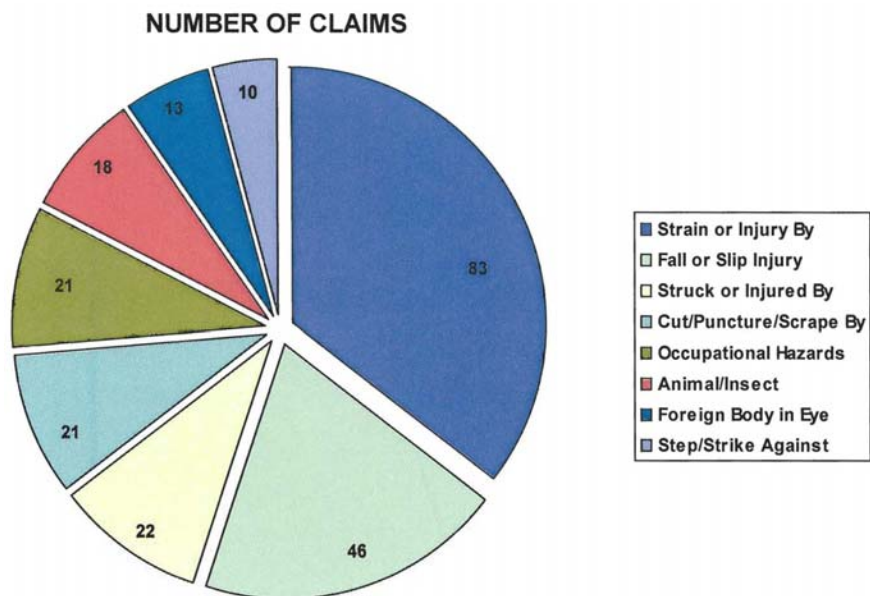
The possibility of causing a muscle strain increases when you don't move properly and you do a lot of reaching, twisting, sideways bending and unequal lifting or carrying.

Some Final Thoughts...

Lifting and over-reaching are some of the main causes of musculoskeletal disorders. Pausing for a moment to make sure that you are lifting properly and not over reaching will help to prevent strains.

The safety services available through IMA's Risk Control team can help you with any ergonomic questions or concerns that you many have. See pages 6-7 for specific ideas on stretching. For more stretching exercises, go to www.kmit.net and enter the the Document Center, next to the July-August edition of City Safe.

KMIT, January 2009 - Present



Introduction to Stretching

K-ISH 125 (7-98)

KANSAS DEPARTMENT OF HUMAN RESOURCES



INDUSTRIAL SAFETY AND HEALTH
785-296-4386

Benefits of Stretching

Stretching is a key component of a balanced exercise program. Performing stretching exercises daily can increase flexibility and maintain healthy joints. Regular flexibility exercise can make activities of daily living easier and improve physical activity performance.

When You Should Stretch

Stretching should be performed before and after your exercise session. The flexibility exercises shown on the opposite page can be performed as a daily exercise routine. These simple exercises can be performed during commercial breaks of your favorite TV show or after prolonged work at your desk.

How to Stretch

- You should never experience pain with any stretching exercise.
- You should only feel a gentle pull in the muscles being stretched.
- Each stretch should be held between 15 and 30 seconds.
- Do not bounce during any stretch, as this could lead to injury.
- You should perform stretching exercises on both sides of the body and your goal should be to move your joints through the full range of motion as determined by your abilities.
- As you stretch, remember to breathe.
- Deep relaxation breathing which consists of deep breathing in your nose and long exhalation through your mouth, can help to relieve stress and relax your mind and body during your flexibility exercises.

STRETCHING GUIDELINES

- Always move slowly into the stretch position.
- Concentrate on the muscles being stretched.
- Breathe in a normal manner.
- Stretch to the point that you feel tension but not pain.
- Hold each stretch for 12-15 seconds.
- Repeat each stretch 3 times.
- Do not bounce when holding a stretch.
- Stretch before, during and after work.
- Have fun!

DO's LIST

- Do stretch your shoulders, elbows and wrists before, during and after work.
- Do keep your elbows close to your sides when working.
- Do work with your wrists in a neutral position.
- Do use ice at the first signs of pain, swelling or stiffness.
- Do change positions frequently.
- Do avoid extended reaching.
- Do avoid shrugging shoulders.
- Do keep elbows bent at 90°.



High Reach Stretch

1

- raise up on tip toes
- raise arms up
- spread fingers
- reach as high as you can

Shoulder Roll

2

- place arms at your side
- lift your shoulders up toward your ears
- hold for 5 seconds and release
- roll your shoulders forward three times
- roll your shoulders backward three times



Publication Sources:

Troy Simpson RPT

OSHA

KDHR

IMA of Kansas, Inc.

Theracare Sports and Industrial Rehab LLC

<http://www.osha.gov>

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KMIT Tip: Incorporating Stretches Such As These Should Be An Integral Part of Daily Start Up in Every City Department!

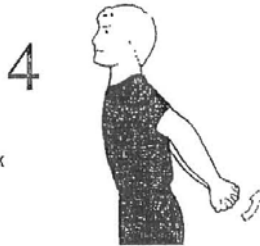


3 Neck Stretch

- look straight ahead (neutral)
- drop left ear toward left shoulder and hold
- return back to neutral
- drop right ear toward right shoulder and hold

4 Anterior Shoulder Stretch

- stand upright
- clasp hands behind back
- bend elbows slightly
- move arms upward



5 Rotator Cuff Stretch

- reach up and over with left hand
- place back of right hand in middle of back
- reach right hand toward left hand
- repeat on opposite side

6 Wrist Extensor Stretch

- relax arms at sides
- rotate both hands inward
- make loose fist
- curl fist upward



7 Wrist Flexor Stretch

- place palms together with fingers at chin level
- raise elbows slowly, keeping palms together



8 Wrist Curls

- support your right arm with your left hand
- with a loose fist, make large slow circles with your right hand
- keep the rest of your arm motionless
- do 10 circles in each direction
- repeat with your left hand



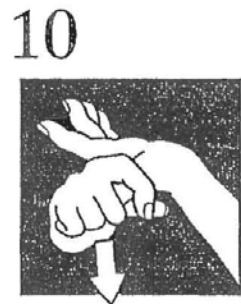
9 Finger Fan

- with arms straight in front and your palms down, bend your wrists up
- straighten and spread your fingers as wide as possible
- hold for 10 seconds
- make a loose fist and repeat



10 Thumb Stretch

- with right palm up and wrist relaxed, use left hand to pull your right thumb downward until you feel a gentle stretch
- do not pull outward
- hold 10 to 15 seconds
- repeat with the left thumb
- this may be repeated for each finger also



Proper Grips



The **Power Grip** is an effective grip. Use the whole hand and all of the fingers to grasp an object.



The **Lateral Pinch** should not be used for lifting or moving heavy objects. This grip is used for light tasks such as sorting.



The **Three-Point Pinch** is used for tasks requiring precision and accuracy but not for tasks requiring strength. This grip is ideal for oil painting.



The **Palmar Grip** is the grip used for holding a baseball. Using all 4 fingers and the thumb, this grip can be used in place of the 3-point pinch.

New Video Available - Safety Awareness for Seasonal Employees!

This 23-minute video covers a variety of safety hazards and safe practices applicable to seasonal and volunteer employees who work in parks and recreation, public works, maintenance and other municipal departments. The KMIT website has a link titled **KMIT Loss Prevention Training Tools**, which takes you to a wealth of information that you can utilize when holding "toolbox" safety meetings for your employees. Go to www.kmit.net and enter the Document Center.

Safe-T-Tips



Protect Yourself Heat Stress

When the body is unable to cool itself by sweating, several heat-induced illnesses such as heat stress or heat exhaustion and the more severe heat stroke can occur, and can result in death.

Factors Leading to Heat Stress

High temperature and humidity; direct sun or heat; limited air movement; physical exertion; poor physical condition; some medicines; and inadequate tolerance for hot workplaces.

Symptoms of Heat Exhaustion

- Headaches, dizziness, lightheadedness or fainting.
- Weakness and moist skin.
- Mood changes such as irritability or confusion.
- Upset stomach or vomiting.

Symptoms of Heat Stroke

- Dry, hot skin with no sweating.
- Mental confusion or losing consciousness.
- Seizures or fits.

Preventing Heat Stress

- Know signs/symptoms of heat-related illnesses; monitor yourself and coworkers.
- Block out direct sun or other heat sources.
- Use cooling fans/air-conditioning; rest regularly.
- Drink lots of water; about 1 cup every 15 minutes.
- Wear lightweight, light colored, loose-fitting clothes.
- Avoid alcohol, caffeinated drinks, or heavy meals.

What to Do for Heat-Related Illness

- Call 911 (or local emergency number) at once.
- While waiting for help to arrive:
- Move the worker to a cool, shaded area.
 - Loosen or remove heavy clothing.
 - Provide cool drinking water.
 - Fan and mist the person with water.

For more complete information:
OSHA
Occupational
Safety and Health
Administration
U.S. Department of Labor
www.osha.gov (800) 321-OSHA

OSHA 3154-07R/05

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