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Back Injury Prevention Awareness Program

Introduction

Have you ever known someone with a back injury or had one yourself? Considering it is the second most common cause of missed days of work in the U.S., you most likely understand how debilitating the injury can be. Only the common cold causes more lost work days. According to the U.S. Bureau of Labor Statistics, in 2007, nearly 236,000 people missed work because of back injury. Each lost an average of 7 days on the job. And for injuries requiring days away from work, the part of the body most often affected by work injuries was the trunk (including the shoulder and back) accounting for 33 percent of all injuries and illnesses.

These are some of the most costly types of work place injuries today. Municipal workers and CIRSA members are not immune. Over the last ten years, CIRSA members have filed over 1200 claims on upper and lower back injuries. More than 5 million dollars were incurred on back strains associated with lifting, carrying, jumping, pushing, pulling, reaching, twisting and repetitive motion. Slips and falls caused back injuries resulted in costs of nearly 1.5 million dollars.

Fortunately, there are resources available and prevention strategies that work. This document is intended as a risk management tool, not a piece of medical literature. It is intended to break down this problem and enable you to make improvements in your worksite to (1) prevent employee back injuries (2) reduce lost work time and productivity, and (3) reduce the dollars incurred for injuries and claims.

This program is a tool for managers, supervisors, safety committees, and risk management professionals to address this prevalent and costly problem. The best and most successful programs for safety and health issues require a proactive program incorporating strong management commitment as well as employee involvement and buy-in. You will find ample tools to assist you in the process of addressing injuries to the back. As always, your CIRSA Loss Control Representative is available to further assist you.

This publication is provided for informational purposes only. As with all CIRSA loss control activities, it is intended only to assist members in their own loss control programs and activities. It is not intended to replace those programs or activities, or to provide specific medical, legal, technical or other advice. Readers should seek professional advice from their own advisors.

Exposures

Anatomy of the Back

- The spine's vertebrae are held together by ligaments.
- Muscles are attached to the vertebrae by bands of tissue called tendons.
- Between each vertebra is a cushion known as a disc.
- Openings in each vertebra line up to form a long, hollow canal.
- The spinal cord runs through this canal from the base of the brain.

• Nerves from the spinal cord branch out and leave the spine through the spaces between the vertebra.

• The normal spine has an S-shaped curve when viewed from the side. This shape allows for an even distribution of weight and flexibility of movement.

Function of the Back

- Our spine supports us in an upright position and enables movement of the trunk.
- The lower part of the back holds most of the body's weight.

• Every time you bend over, lift a heavy object, or sit leaning forward, you put stress on your spine. Your back operates at a 10:1 disadvantage. If you have a 100 pound torso, lifting by simply bending at the back, not using legs, adds 1,000 pounds of pressure to your body's center of gravity.

This applies to lifting up a pencil or your morning paper off the driveway.



Lifting a 10 pound objects adds an additional 100 pounds of pressure on your back. Being 20 pounds overweight adds an additional 200 pounds of pressure. Understanding the forces on the spine, it's easy to see how back injuries occur.

Types of Injuries

The types of back injuries that are most common are muscle strains and lumbar sprains. Strains occur because the muscle

fibers are stretched or torn. Sprains occur because the ligaments are torn and become detached. These injuries cause inflammation of soft-tissues, which is the cause behind the pain in many injuries. Other injuries include ruptured or slipped disc, chronic tension and stress.

An acute trauma, such as a fall or car collision, can cause a back injury, but many injuries are caused by cumulative trauma. You can get away with poor posture for a number of years, but one day, your body will tell you that you are doing something wrong. Even sitting incorrectly in your office chair, leaning forward, can reverse the natural curvature of the spine and add excess pressure on the spine.



We must educate our employees how to maintain a healthy curvature of the spine and reduce repetitive and excessive forces placed on the back. We must also be committed as employers to design the work environment to better fit the employee group.

Who Gets Injured?

Injuries of this type can occur in any department within your operations. Think of exposed employees you may have in your entity, such as:

- Clerical worker sitting for long periods in an office chair
- Librarian shelving books
- Trash truck operator lifting receptacles
- Public works employee lifting heavy equipment
- Heavy equipment operator jumping down to exit the vehicle
- Park and Recreation employee landscaping in a crouched position
- Building maintenance employee shoveling snow
- Fleet mechanic reaching overhead for extended periods
- Aquatics personnel slipping on wet surfaces
- Firefighter carrying reels of hose
- EMT lifting a patient
- Police officer dealing with a resistive suspect

Physical Exposures

These physical conditions increase the risk of a back injury.

- Repetitive work
- Heavy lifting/excessive force
- Awkward posture-twisting, reaching, bending
- Awkward load shape/size
- Overexertion
- Cold working conditions
- Vibration
- Slips
- Continuous standing
- Poor posture in office chair

According to the Mayo Clinic, Additional Risk Factors

These factors put an individual at increased risk beyond the physical exposures they experience at work.

- Smoking
- Obesity
- Older age
- Female gender
- Physically strenuous work
- Sedentary work
- Stressful job
- Anxiety
- Depression

Risk Management Process

To address injuries, put the risk management process to work for you. This is a process of identifying the exposure, analyzing loss data, controlling the risk, and monitoring and revising the program if necessary.

Identify the Exposure

This can be done by evaluating loss history data, distributing questionnaires to employees and supervisors, personal inspections of facilities and job sites, interviews with staff, evaluating loss time/sick leave records for injury trends, or other documents providing telling information. Because employees are out in the field, they experience exposures first hand. Ask for their feedback. Employees often have a wealth of information regarding untreated exposures and enjoy a chance to discuss their ideas.

Another tool to help identify exposures is a **Job Safety Analysis (JSA)** - A job safety analysis is a technique that focuses on job tasks as a way to identify hazards before they occur. It focuses on the relationship between the worker, the task, the tools, and the work environment. Ideally, after you identify uncontrolled hazards, you will take steps to eliminate or reduce them to an acceptable risk level. During a JSA you should identify, analyze and record:

- The steps involved in performing a specific job.
- The existing or potential safety and health hazards associated with each step.
- The recommended action(s)/procedure(s) that will eliminate or reduce these hazards and the risk of a workplace injury or illness.

Tool: See the tools for further instruction and samples (pg. 10)

Analyze Loss Data

Analyzing loss data further helps prevent injuries. Once you've identified the exposures involved with a specified job, you analyze your data. Only after analyzing loss data for the exposures identified can the significance of an issue be determined. The analysis should include loss frequency (how many) and the loss severity (how much). You may also be able to identify departments or types of jobs affected and seasonal trends indicating weather or temporary workers as a factor. You may see more incidents in the afternoon, indicating that worker fatigue may be a factor. Calculating the total expenses incurred for back injury claims will give an indication to the seriousness of the exposure in your municipality. High total expenses will also affect the insurance contribution/premium that your entity must pay.

Tool: Contact CIRSA for loss history reports

Control the Risk

After you have identified back injury exposures and analyzed the frequency and severity, it is then time to evaluate and implement different risk control techniques. Most likely, more than one technique will be necessary to appropriately address an exposure. Techniques you may use to reduce the frequency and severity include:

• **Risk Avoidance**: by totally eliminating or avoiding an activity, the exposure is eliminated. For example, operating a recycling center may cause so many injuries, that your entity decides not to provide that service.

• **Risk Prevention**: reduces the frequency (or number) of a losses occurring. For example, employee training in proper lifting techniques is an attempt at preventing injuries to employees. Implementing mechanical aids, such as a hand truck, is also aimed at prevention, since the aid reduces lifting required by employees.

• **Risk Reduction**: reduces the severity (financial) of a loss that does occur. For example, Return-to-work and Light-Duty programs are attempts to reduce the monetary impact of an injury by getting the employee back to work and rehabilitated.

• **Risk Separation/Duplication**: generally reduces the severity of an exposure by separating or duplicating work activities. For example, cross training employees would enable a work function to continue if one employee was injured, yet another was trained and skilled at performing that function.

• **Risk Transfer**: through contract or insurance, the risk is transferred to another party and away from the entity. For example, many entities contract janitorial services therefore any injury incurred during those services would be transferred to the contractor.

Monitor and Revise

Once you have implemented programs to address losses due to back injuries, you must continue to monitor the effectiveness of those measures, and if necessary revise or alter a program. A new exposure may arise after a program has been implemented, therefore follow up is essential to encompass that exposure in your program.

Strategies

This handbook will discuss many different risk control methods to assist you in addressing the risk of back injuries in your place of work. No single method alone can eliminate the risk. According to the National Institute for Occupational Safety and Health (NIOSH), a comprehensive ergonomics program that strives to protect all workers by redesigning the work environment and work tasks to reduce the hazards of lifting is necessary. Training in identifying lifting hazards and using safe lifting techniques and methods should improve program effectiveness, but should not be the program's sole component.

Controls

There are three generally accepted control methods for work place hazards that follow a chain of command. Engineering controls, Administrative controls, and Personal Protective Equipment should be implemented, in that order, for the most effective program.

Engineering/Physical Controls – Efforts to design the work site, job tools and work methods to match the capabilities and limitations of the workforce.

• Work station lay-out - improving the layout to locate tools and equipment within a short reach or incorporate height adjustable work-

benches to reduce lifting and bending.

• Mechanical Aids - using lift trucks or hand trucks to transport items instead of pushing or pulling. Also using raised platforms or conveyors helps to prevent repetition and overexertion. Other aids that may lessen strain on workers include dollies, fork lifts, pallet jacks, carts, manhole cover lifts, etc.

Reduce the size of the material needing to be lifted.
 Simple changes, such as ordering smaller containers of a material, can make a large impact.

• Material substitution - using a lighter material.

Housekeeping - good housekeeping can prevent slip and fall hazards thereby preventing trauma to the back.
Storage solutions - organize storage so that heavy items are not stored near the very top or very bottom to reduce bending and reaching.



Administrative Controls - Policies and procedures implemented by management in an effort to affect injury rates.

• Change delivery - a vendor may be able to deliver a material to another site for you, instead of requiring employees to do so at the risk of injury.

- Job rotation- reduce exposure by limiting the amount of time spent on a task.
- Rest breaks schedule more task breaks to allow for rest and recovery
- Supervision ensure that employees are performing a job safely and properly.

• Training - educating workers in risk factors for back injuries and proper work procedures to limit risk of injury.

• Stretching programs - educating employees on the importance of stretching to warm up the muscles necessary to lift.

• Wellness programs - instill programs such as smoking cessation, weight loss strategies, and physical fitness to lessen personal risk factors.

Personal Protective Equipment

The most recognized piece of personal protective equipment for preventing this type of injury is a back belt. After a review of scientific literature, NIOSH has concluded that, because of limitations of the studies that have analyzed workplace use of back belts, the results cannot be used to either support or refute the effectiveness of back belts in injury reduction. If back belts are used in your entity, remember that the belt does not change the risk factors that cause the injuries. Belts should only be used in conjunction with other engineering and administrative controls. Users should be reminded that they can not lift more weight with a back belt.

Implementation

When implementing controls, work with employees to decide the best methods for their department and work tasks. It would be wise to try multiple methods or start with a pilot program before a full scale implementation. This fosters employee involvement and buyin, as well as allowing time to evaluate the control methods for effectiveness.

Back Injury Prevention Tools

For a comprehensive program, several tools should be implemented. Choose from the list below focusing on both Engineering controls and Administrative controls. See the resources on the following pages.

Job Safety Analysis

Use a JSA to identify exposures of a particular job task and recommend corrective actions to prevent injuries.

Behavior Based Safety Program

Behavior-based safety is an ongoing process that identifies root causes of at risk behaviors for various jobs to reduce the risk of injury. Checklists are designed and employees observe each other performing these jobs to determine if they are working safely or at-risk.

Ergonomic Evaluation

Ergonomics is a science of adjusting the work environment and tasks to fit the employee.

- Office workstation ergonomic evaluation checklist
- CIRSA Online University Courses

Basic Lifting Techniques

- Fact Sheet- Basics of Good Lifting
- Safety Stop-Use as a discussion point with staff, a payroll stuffer, newsletter article

Poster - Lift it Right!

Post as a reminder to employees to use safe lifting practices. It is also available at www.cirsa.org and can be printed in 11x17 size format.

Stretching Exercises

Proper stretching conducted before strenous work or exercise warms the muscles, promotes good blood circulation and reduces the risk of injury.

• Illustrations of stretching exercises that employees may utilize both on and off the job

Modified Duty/Light Duty Sample Policy

A prompt return to work in a modified duty capacity can provide cost savings, minimize the disruption of family income for the injured worker, and enhance the chances of successful recovery and rehabilitation from an on-the-job injury.

Training

- Online University
- CIRSA Video Library

• PowerPoint Presentations- available with script for member use or for onsite training provided by a Loss Control Representative.

Definition:

Job Safety Analysis (JSA) is a method that can be used to identify, analyze and record:

- The steps involved in performing a specific job.
- The existing or potential safety and health hazards associated with each step.

• The recommended action(s)/procedure(s) that will eliminate or reduce these hazards and the risk of a workplace injury or illness.

Hazard Types:

The following hazards should be considered when completing a JSA:

- The existing or potential safety and health hazards associated with each step.
- Impact with a falling or flying object.
- Penetration of sharp objects.
- Caught in or between a stationary/moving object.
- Falls from an elevated work platform, ladders or stairs.
- Excessive lifting, twisting, pushing, pulling, reaching, or bending.
- Exposure to vibrating power tools, excessive noise, cold or heat, or harmful levels of gases, vapors, liquids, fumes, or dusts.
- Repetitive motion.
- Electrical hazard.
- Light (optical) radiation (i.e., welding operations, laser surveying, etc.).
- Water (potential for drowning or fungal infections caused by wetness).

Conducting the Analysis:

1. Select jobs with the highest risk for a workplace injury or illness.

2. Select an experienced employee who is willing to be observed. Involve the employee and his/her immediate supervisor in the process.

3. Identify and record each step necessary to accomplish the task. Use an action verb (i.e. pick up, turn on) to describe each step.

4. Identify all actual or potential safety and health hazards associated with each task.

5. Determine and record the recommended action(s) or procedure(s) for performing each step that will eliminate or reduce the hazard (i.e. engineering changes, job rotation, PPE, etc.).

Job Safety Analysis Worksheet Example

Job Safety Analysis \	Norksheet		
Title of Job/Operation: Mowing Grass		Date:	
Job Title:		Analyst and Date:	
Division/Department/Section: Recreation and Parks		Approved By and Date:	
Personal Protective Equipment	required or recommended: Hat, hearir	g protection, safety glasses, sunscreen	
Sequence of Basic Job Steps	Potential Accidents or Hazards*	Recommended Safe Job Procedures	
Selecting lawn mower	Unsafe mechanical problems	Proper maintenance, inspection guards	
Load, transport, unload mower	Strain Slip/trip/fall	Use correct body mechanics and assistance in moving	
Clear area of debris	Flying objects	Walk area and inspect	
	Low hanging objects/falling debris	Be aware of surroundings	
Block area to visitors/cars	Injury to bystander or damage to Vehicles	Mow during times when visitors are least likely to be present	
Mow area	Injury to operator w/improper use	Training	
	Thermal burns	Always allow equipment to cool	
	Damage to area being moved	Proper planning, knowledge of area	
	Noise	Hearing protection	
	Operation hours	Rotate cutting chores	
Load, transport, unload mower	Same as #2	Same as #2	
Clean mower	Unsafe conditions for next employee	Wash, service and sharpen blades, check bolts.	
	Reduced operation life	Maintenance inspection	

Job Safety Analysis – Guideline Form

JSA#	Job Title		Pa	age	
Date		Title of Person Doing Job			
Location		Department		Supervisor	
Analysis By		Reviewed By		Approved By	
Required / Recommended	l Pers	onal Protective Equipment	:		
JOB STEPS	POTENTIAL HAZARDS		R	RECOMMENDED ACTION	
Break down the specific job into steps or tasks. This identifies potential hazards that employees may face. A change in activity, direc- tion, or movement will determine where a step starts or finishes. List all steps needed to perform the job.	Iden caus viror the j pote Ask iden step Is th to sa exan radia vapo Are t fallir Is th from twist Can in, o Can agaii cont caus	tify all hazards - those ed by conditions, the en- iment, or associated with ob procedure. Hazards are ntial dangers. yourself these questions to tify hazards regarding each e environment hazardous affety and/or health? For nple, is there exposure to ation, heat, dust, gases, ors, or fumes. there tripping, slipping, or og hazards? ere potential for strains pushing, pulling, bending, ting, or lifting? body parts be caught by, r between objects? the employee strike nst, be struck by, or have act with objects that may e injury?	Det ced nat lead wo Firs haz dev per (PP sus pra erg Pro tior haz be con cha Des pro haz wit safe Lift	termine what actions or pro- lures are needed to elimi- e or reduce hazards that can d to an accident, injury, or rk related illness. et, try to (1) engineer the tard out, (2) provide safety vices or guards, (3) provide sonal protective equipment PE), (4) provide training, (5) tain decent housekeeping ctices, (6) exercise effective onomic principles. wide a recommended ac- n or procedure for each card. Serious hazards should eliminated and a new JSA npleted to represent the anged situation. Scribe the safe operating cedures to eliminate the cards by starting statements h action words, i.e. "Wear ety glasses while grinding, or using leg muscles."	

Frequently Asked Questions

Behavior-based safety (BBS) has been utilized in private industry for over two decades. Many organizations who have implemented BBS have experienced a number of benefits, including a reduction in the frequency and severity of employee injuries. In November 1999, CIRSA instituted a pilot program to determine if behavior-based safety could be successfully implemented in public entities. Over the next year, twelve member municipalities implemented the BBS process. Three years later, an analysis of the BBS pilot program has shown positive results in terms of reduced workers' compensation claims. A recent study showed that workers' compensation claims costs decreased by 43% and the frequency of claims by 8% for participating members. In addition, members reported that the total safety culture in their entities and employee safety awareness has improved considerably.

What is Behavior Based Safety?

Behavior-based safety is an ongoing process that identifies root causes of at risk behaviors for various jobs to reduce the risk of injury. Checklists are designed and employees observe each other performing these jobs to determine if they are working safely or at-risk. Observation data is collected regarding the frequency and causes of those behaviors. Obstacles to performing a task in a safe manner are analyzed and removed. Such obstacles may be improper equipment, lack of training, inadequate procedures, etc. The observation data is used for recognition, system problem-solving, and continuous improvement. As employees become more comfortable with the process, they begin to look out for each other informally and safety coaching becomes a natural part of the work culture.

What is needed to successfully implement BBS?

1. Effective Leadership - Management must be committed to the BBS process if it is to be successful. Involvement from the city manager or town administrator, department heads and supervisors is essential.

2. Established Safety Program - It is helpful to have a basic safety program in place before attempting BBS. Most CIRSA members have ongoing loss control programs in place including safety committee, safety training, inspections and other safety activities.

3. Safety Team - A safety committee, risk management committee or other employee team should be established to oversee the implementation and ensure its ongoing success. It is difficult for one person trying to do it alone, and if that person leaves the organization, the process could collapse.

4. Positive Organizational Climate - Implementations appear to be more successful if there is an existing positive work environment of trust, open communication and respect for individuals. Organizations with internal strife may have a harder time implementing BBS.

5. Measurement and Accountability - Those entities with successful implementations made the observation and feedback system mandatory, at least in the beginning.

All though some experts say observations should be voluntary, we've found that many employees will not participate if it's totally optional. Setting goals for the number of observations to be conducted in defined timeframes and seeing that these goals are accomplished seems to have received the best results.

How do you go about implementing BBS?

The CIRSA Loss Control team will work with key people in your entity to devise an implementation strategy. Program details will be discussed. Training for managers, the implementation team and employees will take place. BBS may be implemented in one or more departments, or entity-wide.

What are the Benefits of BBS?

Based on member experience, there is typically an increase in employee safety awareness and a greater ownership for safety among all employees. The safety culture of the entity is enhanced and safety becomes an organizational value. There may be a reduction in injury rates, depending upon how widespread the process is and whether you have had frequent accidents in the past. Some entities have improved working conditions through the purchase of new equipment and development of safe job procedures.

When can I expect results?

In some entities, the impact of BBS has been immediate and in others it has taken several years to impact the accident rate. BBS is not a quick fix. It takes time, effort and commitment. BBS is an ongoing process of continuous improvements.

What are some of the obstacles that must be overcome for a successful implementation?

In the beginning, employees may question whether the observation and feedback system will be used for disciplinary action. Disciplinary action against employees, of course, should never be taken as part of the BBS process. Experience has shown that in takes about six months for employees to overcome these fears and see that the process is meant to help them avoid injuries, not catch them doing something wrong.

How much money and time does it take for a successful implementation?

The direct costs to implement BBS are minimal. There are indirect costs related to the time it takes to prepare observation forms, track data and train employees in BBS concepts and how to conduct observations. Depending upon how many employees are involved, there are other indirect costs to allow employees the time to conduct observations as well. The time to conduct an observation varies but they usually can be competed in 15 minutes. Some observations detect unsafe conditions as well as at-risk behaviors. Management should be prepared to analyze conditions as well as behaviors to determine what corrective action should be taken to prevent injuries. This may include purchasing safer equipment, establishing safe job procedures or retraining employees. These investments usually pay off in terms of reduced injuries and property damage.

Office/Workstation Ergonomic Evaluation

NameJob	Duty	# of hrs/day at compute	er
Chair 1) Chair is easily adjustable (height, lower b	oack support, etc.)?	Yes	No
2) Chair is in good repair and is not modifie	d by user to increase comfort?	Yes	No
3) Chair armrests (optional) are adjustable ar	d do not interfere with workstation	or user? Yes	No
4) Feet rest flat on floor or are supported by	v footrest? (foot to ankle approx. 9	0 degrees) Yes	No
5) Forearms and thighs are near parallel wit	h the floor, with elbows relaxed a	t side? Yes	No
6) Chair/carpet mat is used?		Yes	No
7) Chair is correct size for user (seat pan wi	dth and length, back rest height)?	Yes	No
8) Chair rolls easily on its casters?		Yes	No
9) Good whole body posture is utilized and	monitored while sitting?	Yes	No
Workstation and Monitor 10) Workstation is adequate height, width a	nd depth or adjustable?	Yes	No
11) Monitor is positioned 24 or more inche	s from, and square to the user?	Yes	No
12) Is the face of the monitor perpendicula	r to your line of sight?	Yes	No
13) Monitor is adequate size for work detail (the greater the detail, the larger the	monitor)? Yes	No
14) Contrast (>50%) and brightness (< 50%) are adjustable, and the screen is k	ept clean? Yes	No
15) Top of screen is slightly below eye level	(even lower for users with bi/trife	ocals)? Yes	No
16) Keyboard/mouse tray is adjustable and	allows for neutral position of han	ds/wrists? Yes	No
17) Is a soft touch used with the keyboard	and mouse?	Yes	No
18) Mouse is positioned next to keyboard (right or left) with adequate works	pace? Yes	No
19) Mouse sensitivity adjusted for the work	required?	Yes	No
20) Document holder positioned at same dis	ance and height (right or left) as th	e monitor? Yes	No
21) Frequently used items are positioned w	ithin easy arms reach (no twisting	; at waist)? Yes	No
22) Space separation is utilized for different	work tasks?	Yes	No

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Lighting and Glare

23) Light source (natural and/or artificial) are perpendicular to monitor to minimize glare?	Yes	No
24) Light source is indirect and diffuse?	Yes	No
25) Task lighting provided (not less than light emitted by the monitor)?	Yes	No
26) Lighting (natural and artificial) is adjustable?	Yes	No
27) Are walls of work area painted a flat, medium to dark color (not white)?	Yes	No
28) Horizontal blinds are adjusted to reflect natural light toward ceiling, not floor?	Yes	No
29) Glare on the monitor has been checked with the monitor turned off?	Yes	No
General 30) Are task breaks utilized (5 minutes/hour or 15minutes/2hours, gross vs. fine)?	Yes	No
31) Eye breaks are taken (20 seconds every 20 minutes) and frequent blinking performed?	Yes	No
32) Phone equipment is appropriate for phone work volume/frequency/multi-tasking?	Yes	No
33) Head is kept straight and centered over shoulders, eliminating the flexed neck position?	Yes	No
34) Whole body stretches and relaxation are performed during the workday?	Yes	No
35) Computer, electrical, and phone wires are secured to bottom of workstation?	Yes	No
36) There is adequate room under workstation for feet and legs?	Yes	No
37) The temperature of the work area is maintained at a comfortable level?	Yes	No
38) Adequate hydration is maintained (avoiding highly caffeinated beverages)?	Yes	No
39) There are no annoying distractions or noises in the area?	Yes	No
40) Off-duty rest/recuperation is utilized?	Yes	No
41) Proper nutrition and routine exercise are maintained?	Yes	No
42) When a problem exists with my workstation, I am confident that it will be resolved?	Yes	No

No answers indicate that additional investigation or a change/correction is needed

The level of ergonomic quality/satisfaction is not always directly proportional to the level of money spent on the issue.

Ergonomic vendors should be requested to provide a variety of equipment (along with set up and training) within your specific budget constraints, so employees can pick the specific piece that works best for them. "One size/type fits all" is not the approach to take when purchasing equipment.

While at first, poor ergonomics might lead to discomfort, reduced efficiency and job dissatisfaction, depending on the force, repetition, awkward position, and individual susceptibility, disabling injuries can result.

Focus on reducing repetitions, awkward postures and positions, and force used to perform tasks. Page 16

Fact Sheet-Basics of Good Lifting

In industry, many heavy objects are lifted with mechanical aids such as forklifts, hoists, platforms, and other types of equipment. Municipal work may not lend itself to always having these tools on hand. Oftentimes, it is necessary to lift or unload by hand, moderate to heavy objects. When that is the case, knowing the proper ways to lift can save employees a great deal of pain and misery from a sprained back.

Size up the load before trying to lift it

Test the weight by lifting at one of the corners. If the load is too heavy or of an awkward shape, the best thing to do is encourage your employees to: (1) get help from a fellow worker, (2) use a mechanical lifting device or, (3) if they must lift, they must make sure they can handle the weight.

Bend the knees

This is the single most important rule when lifting moderate to heavy objects. Take a tip from professional weight lifters. They can lift tremendous weights because they lift with their legs, not their backs. When lifting an item, employees should:

(1) Place their feet close to the object. (2) Center themselves over the load. (3) Bend the knees. (4) Get a good hand hold. (5) Lift straight up, smoothly. (6) Allow the legs, not the back, to do the work.

Once the load is lifted:

• Do not twist or turn the body once the lift is made—keep the load close to the body, and keep it steady. Any sudden twisting or turning could result in back injury.

• Make sure paths are clear of obstacles and that there are no hazards, such as holes or spilled liquids in the path. Turn the body by changing foot positions, and make sure of the footing before setting out.

• Set the load down properly—setting the load down is just as important as lifting it. Lower the load slowly by bending the knees, letting the legs do most of the work. Don't let go of the load until it is secure on the floor or other surfaces.

• Always push, not pull the object when possible—when moving an object on rollers, for example, pushing puts less strain on the back and is safer, should the object tip.

Planning ahead

Planning ahead makes sense. If employees know certain loads will have to be carried from an unloading area, they should place the objects on racks, not on the ground, whenever possible. That way the load will not have to be lifted from the ground. They should not attempt to carry loads that are clearly too heavy for them. Long objects, such as pipes and lumber, may not be heavy, but the weight might not be balanced and such lifting could also result in back sprain. Such objects should be carried by two or more people.

If the load can be split up into smaller ones, employees are better off in doing that, even if loading takes a few extra minutes. Trying to lift it all at once may be asking for trouble when the weight is great.

When working on something low, employees should bend their knees. They should keep their backs as straight as possible. Bending from the waist can lead to back pain. If they have to work with their back, they should keep their knees bent and their back flat. In both of these situations, frequent rest breaks are necessary to keep from getting back fatigue.



TOPIC: Basic Lifting Techniques

In spite of the increased use of machinery and equipment, lifting, moving, and carrying are still an integral aspect of many jobs. It is important to understand some basic lifting principals to help reduce back strain potential. Remember, back injuries are usually the result of cumulative trauma from poor lifting techniques. The final straw could be doing something as simple as tying your shoe.

Practice the following safe lifting techniques:

Get a good footing, and size up the load.

Place your feet approximately shoulder-width apart.

Bend at the knees while keeping your back relatively straight to grasp the load. Get a firm hold, keep the load close to the body, and lift gradually by straightening the legs.

Don't lift and twist in the same motion. Lift, point feet in desired direction, then deposit load.

Get help if the load is too heavy. Use mechanical aids to lift heavy loads whenever possible.

Push the load, don't pull. It is less stressful on the back to push a dumpster than to pull one into place.

Keep fit! Stretching exercises before work help keep the back flexible.

Lift It Right

Evaluate the load and path of travel. Get help if it is too heavy.

Your feet should be shoulder width apart.

Bend at the knees, not at the back.

Gradually straighten your legs.

Keep the load close to your body.

Point your feet in the direction of

travel. Don't lift and twist.



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Stretching

Another method used to prevent injury, both at the workplace and during personal hobbies or athletics, is stretching prior to, during and after activity. Studies have shown the possibility of reducing the number of injuries incurred, as well as reducing the costs for treatment when injuries do occur when stretching is performed.

For any stretching routine, the following recommendations apply:

• Warm up for at least 5 minutes prior to stretching

• Stretches should be customized to commonly performed tasks. Some areas on which to focus include:

- Shoulders
- Lower back
- Sides
- Quads
- Hamstrings
- Stretch regularly, at least 2 to 3 times a week
- Perform stretches correctly:
 - Hold stretch 10-30 seconds
 - 3-4 repetitions per muscle group
 - Emphasize tight muscles
- Intensity should be to a position of mild discomfort only
- Stretch at appropriate work times throughout the day

The following pages include diagrams of simple stretches that can be performed at work or at home.

At Work Stretches

How To Stretch:

Stretch to a point where you feel mild tension and relax as you hold the stretch for 10-30 seconds. Breathe slowly and rhythmically as you stretch within your comfortable limits; never to the point of pain. To stretch correctly, the feeling of stretch should slightly subside as you hold the stretch.

Note: If you have had any recent surgery, or muscle or joint problems, please consult your personal health professional before starting a stretching or exercise program.



If possible, hold on to something for balance. Lift your right foot up off the floor and rotate foot and ankle 7-8 times clockwise, then 7-8 times counter-clockwise. Repeat for left foot and ankle.



To stretch your calf, stand a little ways from a support and lean on it with your forearms, your head resting on your hands. Place your right foot on the ground in front of you, leg bent, keeping left leg straight, behind you. Slowly move your hips forward until you feel a stretch in the calf of left leg. Be sure to keep your left heel on the ground and your toes pointed straight ahead. Hold an easy stretch for 15-20 seconds. Do not bounce. Repeat for right leg.



Push away from the solid support and slightly bend the left leg (which is behind you), keeping the foot flat. Most of your weight should be on your left leg. This gives you a lower stretch in the back of the leg (the soleus and Achilles tendon). Hold for 10-12 seconds, each leg. This area needs only a slight feeling of stretch.



With your feet shoulder width apart, toes

pointed out a little and heels on the ground, bend your knees and squat. It is a good idea to hold on to something for support. This is a great stretch for your

ankles, Achilles tendons, groin, lower back and hips. Hold stretch for 10-15 seconds.

If knee pain is present, discontinue this

stretch.



Raise the tops of your shoulders toward your ears until you feel slight tension in your neck and shoulders. Hold this feeling of tension for 3-5 seconds, then relax your shoulders downward into their normal position. Do this 3 times.

Interlace your fingers above your head. With your palms facing upward, push your arms slightly back and up. Feel the stretch in arms, shoulders, and upper back. Hold stretch for 15 seconds. Do not hold your breath. As always, keep knees slightly bent for better balance and to protect your back.

This routine has been designed specifically for CIRSA from stretches excerpted from Stretching Inc. publications, including STRETCHING FOR WORKING AMERICA ©1988. For a free catalog of Stretching Inc. publications/products contact: Stretching Inc., P.O.Box 767, Palmer Lake CO 80133-0767, 1-800-333-1307 or see our website http://www.stretching.com At Work Stretches continued:







Hold your right arm just above the elbow with your left hand. Gently pull your right elbow toward your opposite shoulder as you look over your right shoulder. Hold the stretch for 15-20 seconds. Stretch both sides.

bent. Rotate hips to the right as you look over your right shoulder. Hold an easy stretch for 10 seconds. Stretch each side twice. Be relaxed and breathe easily. This is a good stretch for lower back and hips.

Start with your hands on your hips, feet

pointed straight ahead, knees slightly

Standing with knees slightly bent, place palms on lower back just above hips, fingers pointing downward. Gently push your palms forward to create an extension in the lower back. Hold comfortable pressure for 10-12 seconds. Repeat twice. Use this stretch after sitting for an extended period of fime.



The leg on the ground should be slightly bent (1") with your foot pointed forward as in a proper walking or running position. The leg resting on the support should be at a comfortable height and straight, with foot relaxed and upright. Slowly bend forward at the waist, with your eyes looking forward, until you feel a stretch in the back of the raised leg. Hold and relax. Find an easy stretch, relax, and then stretch further when it becomes easier to increase the stretch. Hold stretch for 20 seconds for each leg.



With fingers interlaced behind head, keep elbows straight out to side with upper body in a good aligned posi-tion. Pull shoulder blades together to create tension for 3-4 seconds, then relax. Do several times.

Place both hands shoulder width apart on something which is about eye level. Let your upper body drop down as you keep your knees slightly bent. Your hips should be directly above your feet. To change the area of the stretch, bend your knees just a bit more and/or place your hands at different heights. Hold the stretch for at least 30 seconds. This type of stretch is good for a tired upper back. Remember to always bend your knees when coming out of the stretch.

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At Home Stretches

How To Stretch:

Stretch to a point where you feel mild tension and relax as you hold the stretch for 10-30 seconds. Breathe slowly and rhythmically as you stretch within your comfortable limits; never to the point of pain. To stretch correctly, the feeling of stretch should slightly subside as you hold the stretch.

Note: If you have had any recent surgery, or muscle or joint problems, please consult your personal health professional before starting a stretching or exercise program.



Relax on your stomach with your head turned to the side. Next, support upper body up with your elbows on the ground for a comfortable stretch for 15-30 seconds. Return to lying position for 30 seconds. Repeat 3 times. Be sure your lower back is relaxed during the stretch.



Lying on your back with knees bent and feet resting on the ground interlace fingers behind your head and rest arms on the mat or carpet. Using the power of your arms, slowly bring your head forward until you feel a slight stretch. Hold an easy stretch for 5 seconds. Repeat 3 times. Do not overstretch.



Pull your right leg toward your chest. For this stretch keep the back of your head on the mat, if possible, but don't strain. Hold an easy stretch for 30 seconds. Repeat, pulling your left leg toward your chest.



Lift your leg up toward a 90 degree angle at the thigh joint. Keep your lower back flat against the floor during the stretch. Hold the stretch for 15-20 seconds. Stretch both legs.



Put the soles of your feet together with your heels a comfortable distance from your groin. Put hands around your feet and slowly pull yourself forward until you feel an easy stretch in the groin. Make your movement forward by bending from the hips, not from the shoulders. If possible, keep your elbows on the outside of your lower legs for great stability during the stretch. Hold a comfortable stretch for 30-40 seconds.

Place the ball of your foot up on a secure support while holding with your hands if possible for balance and control. Keep the foot of the down leg pointed straight ahead. Move your hips forward to stretch your groin, hamstrings, and front of hip. Hold for 30 seconds. Stretch both legs.

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Modified Duty Program

This section contains guidelines for implementing a modified duty program in your entity. A prompt return to work in a modified duty capacity can provide cost savings to the workers compensation insurance carrier and employer alike, minimize the disruption of family income for the injured worker, and enhance the chances of successful recovery and rehabilitation from an on-the-job injury.

A modified duty program must begin at the management level of the entity and should ideally be assigned to one individual to ensure the continuity of the program.

Once the employee has been injured, the employer should advise the employee and the medical providers of the modified duty program. Physicians will release their patients to modified duty only when they understand what types of modified work is available and how the program is managed.

When placing a worker into the modified duty program, the best choice, if possible, is to have the employee return to a job in the same department at the same wages. Obviously, this is not always possible. Return to any job for any number of hours may be preferable to staying at home.

The employer should obtain from the treating physician a written release for modified duty outlining the employees' physical restrictions to ensure a proper match between the injured worker and the modified job.

The employer should also contact the CIRSA claims adjuster on the file and notify them of the modified duty placement.

If the modified duty placement is done with the creation of a temporary job, the temporary nature of the job, and its duration, should be made clear to the employee.

Once assigned to modified duty, the employer should monitor how the employee is adjusting to the work to ensure that the job duties are not aggravating the workers injury.

Finally, the employer should conduct periodic assessments of the workers' rehabilitation progress with the treating physician and the worker aimed at returning the worker to their regular duties as soon as it is medically safe to do so.

At the end of this section are sample modified duty policies and a modified duty restrictions form for use by a medical provider.

As always, your CIRSA Loss Control and Claims Department representatives can provide additional resources and recommendation for implementing and maintaining a successful modified duty program.

CIRSA Modified Duty/Temporary Work Reassignment Policy

<u>Purpose</u>

This document outlines the policy concerning modified duty/temporary work re-assignment, in circumstances where determined appropriate for regular, full-time employees who (1) are unable to perform their regular duties due to a work-related injury or illness, or (2) pursuant to the Americans with Disabilities Act (ADA), have a disability such that reasonable accommodations are needed in order to permit them to perform the essential functions of their job.

Discussion

Modified duty or temporary work re-assignment shall be considered for an employee who (1) is unable to perform his/her regular duties due to a work-related injury or illness, or (2) has a disability such that reasonable accommodations are needed in order to permit him/her to perform the essential functions of his/her job. However, an injury or illness must generally be one which is expected to require the employee's absence from his/her regular job assignment for a period of five or more consecutive working days. A disability must be defined as such under the ADA and applicable regulations; temporary, non-chronic impairments or short duration, with little or no long-term or permanent impact, will generally not be considered disabilities.

The type of modified duty/temporary job reassignment available include the following:

- Job restructuring by reallocating or redistributing nonessential, marginal job functions, or by altering when and/or how an essential function is performed.

- Reassignment to another, vacant position, if accommodation by restructuring within the employee's current position would pose an undue hardship. Reassignment to a lower position may occur if no accommodations would permit the employee in his/her current position and there are no vacant equivalent positions available.

- Other types of accommodations may be available where warranted under the ADA.

Each of the following conditions must be met by an employee seeking modified duty/ temporary reassignment.

– The employee must provide a WORK STATUS form from the designated physician indicating he/she is unable to perform his/her regularly assigned duties. The form must contain the physicians' estimation of the time frame the condition is expected to exist, and a statement from the physician releasing the employee to return to work for the modified duty/temporary reassignment. Limitations or restrictions shall be specifically documented on the WORK STATUS form by the physician; the physician shall also verify on the form that the modified duty or temporary reassignment can be performed by the employee and is within the employee's limitations or restrictions.

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- The Department Manager must determine that modified duty/temporary reassignment is available within the department or within the organization, that the modified duty/temporary reassignment is not imposing an undue hardship on operations.

The Department Manager will be responsible for overseeing the modified duty/temporary reassignment and tracking the number of hours worked by the employee each week.

Regular updates from the physician on the employee's condition may be required by the Department Manager during the modified duty/temporary reassignment period.

All information from the physician shall be collected and maintained on separate forms in separate medical files and shall be treated as confidential medical records except as otherwise permitted or required by law.

The modified duty/temporary reassignment shall be evaluated every two weeks by the employee's Department Manager, and other managers whose department may be affected by the modified duty/temporary assignment, regarding continuation or termination of the modified duty/temporary reassignment.

A physician's release authorizing the employee to return to full regular duty shall be required before the employee may be returned to his/her original position.

In no way shall modified duty/temporary reassignment confer any continuing right on the employee to occupy the position as modified, or the position to which he/she is temporarily reassigned, or any other position.

As provided in C.R.S. 8-42-105, an employee who refuses a medically authorized modified employment may be subject to reduction or termination of certain workers' compensation benefits.

Videos:

#4084 Back Injury Prevention

This 13-minute video and exercise workbook provides a comprehensive approach to the aspects affecting back health. This video discusses the interrelationship of muscles, ligaments, vertebral disks and spine, and how conditioning and body physics affect the back system. Emphasizes setting up your work station, home environment and automobile for maintaining a healthy back.

#4029 Back Injury Prevention

Avoid improper lifting leading to degeneration of disks and severe back problems. This 11-minute video covers: - Back mechanics: structure and function; range of motion and disk damage. - Encouragement of stretching and exercise. - Lifting techniques: load and counterload; 10:1 ratio; palm grip; load in close; leg power and lifting in awkward positions.

#4059 EMS - Patient Lifting - Back Injury Prevention

Back strains and pain are the most common injuries for EMS personnel. This 13-minute video was filmed on location at actual emergencies showing proper lifting techniques, as well as lifting patients on straight-back chairs and backboards down stairways.

#4062 Talking Back: Back Injury Prevention

This 12-minute video provides useful techniques for preventing on-the-job injuries, with an emphasis on patient-care staff. This video discusses: Proper posture and moving techniques; Patient transfer and proper lifting

#4040 Ergonomics Success - Back Exercises

This 14-minute video is part of the "Ergonomics Success" (#253) series. In addition to the video, this program comes with a Leader's Guide and an Employee Action Card. This program covers the back "S" curve, and exercises that can be done while standing, sitting, and lying down.

#4041 Ergonomics Success - Lifting

This five-minute video is part of the "Ergonomics Success" (#253) series. In addition to the video, this program comes with a Leader's Guide and an Employee Action Card. This program covers how improper lifting can take its toll on the back, ways to eliminate lifting in certain situations, importance of stretching and good posture, going through the proper lifting techniques, how not to lift and examples of lifting safely on the job.

#4046 Straight Back Talk

This 10-minute video gives a new approach to back injury prevention. The four main points are illustrated in various work and home settings, including: Preserve the curves; Build a bridge; Keep it close; Lock and lift. It discusses how the back is designed to operate most efficiently for physical work.

#4030 Preventing Injury Through Body Mechanics, Ergonomics and Physical Fitness

This CIRSA-produced, 18-minute video discusses the importance of using proper body mechanics, ergonomics, and physical fitness in preventing cumulative trauma injuries both on and off the job. Various scenarios involving public entity employees are depicted. Proper lifting techniques, ergonomic risk factors, using proper tools and equipment, stretching exercises, and physical fitness are emphasized. A handbook accompanies this video.

#5076 Back Safety for Custodial, Landscape and Maintenance Workers

This 20-minute video is a guide to the basic steps that workers must carry out in order to avoid back injuries. Body Basics include: Lifting below the waist; Lifting above the shoulders; Lifting and turning

#1031 Speak Up! Commit To Give Feedback

This 10-minute video illustrates the importance of providing feedback to your coworkers when you observe them performing a behavior or in an environment that could pose a risk. Several examples of risky behavior and methods for communicating that risk for the benefit of the employee are shown. Helps to overcome resistance, which everyone has, in giving valuable feedback. Helpful refresher for those involved in or considering Behavior Based Safety. The video includes a Power Point presentation and handbook.

#1035 Listen Up! Commit to Receive Feedback

This nine-minute video is the follow up program to "Speak Up – Commit to Give Feedback" (video # 344). The scenarios in this program demonstrate the internal challenges we all face when receiving feedback. It's easy to conclude we're being criticized when someone gives us feedback when in reality the other person is stepping up because they sincerely care for our safety. When we focus on the message, not the messenger, and commit to making a change, we contribute to the development of a positive safety culture.

#4004 Stretching With Bob Anderson - The Video

This video is based on Bob Anderson's best selling book, "STRETCHING". Learn the who, why, when, and how of proper stretching. The video includes instructions that lead you through easy-to-do stretches for the back, groin, hips, legs, feet, and upper body. It concludes with a 14-minute overall routine that can be followed for everyday fitness or for specific sports or activities. Appropriate for people of all ages and interests.

#4072 The Work Athlete

This 20-minute video is split into two segments. The first segment discusses how similar those performing heavy or repetitive tasks are to athletes and the benefits of warming up similar to an athlete. The second segment illustrates stretching exercises that most benefit muscles generally employed while at work. This second segment can be used on a routine basis by streets or sanitation personnel or any group performing heavy work; even for the daily warm-up.

#4103 Back Safety: Lift Well, Live Well DVD

Remind your employees that it's far better to take care of their backs before pain sets in with this valuable program. It teaches workers how to "head off" back pain by using their heads and always being aware of how to protect their backs from injury, through careful lifting and invigorating exercise. Topics include back basics, positive steps, warning signs, proper lifting and exercise.

#4105 Back Protection: Defending your Safety Zone DVD

Your employees might not have much in common with Tiger Woods and other famous athletes, but like the pros they can overdo it with their bodies and hurt their backs. This dynamic, sports themed Trainers toolkit compares the physical rigors workers face on the job with the physical challenges of professional athletes, stressing important techniques for back safety that can prevent injuries. The toolkit contains the program Back Protection: Defending your Safety Zone employee handbook, a leaders' guide with customizable PowerPoint, and poster.

Ordering

Ordering training videos is easy.

Online:

You can order online at www.cirsa.org in the Member section (you will need a user name/password) under the Loss Control tab. If you need web access please contact our Membership Services Department.

Phone: 303.757.547 or 800.228.7136

Fax: 303.757.8950

Email:

Email Channa Skinner at channas@cirsa.org or Marji Perkins at marjip@cirsa.org.

Online University Free Training Courses

Employee Registration Instructions

All entities must be registered in order to allow employees to self register. If you have questions regarding your entity, call our Loss Control Department at 303.757.5475 or 800.228.7136.

1. Log on to www.cirsa.org.

2. Click on "Login" in the Online University Login box on the right side of the page.

3. If you are not a registered user, click on the I Am a New User button at the bottom of the page.

4. Click Register Now at the bottom of the page, and follow the registration instructions.

5. Once on the "CIRSA Registration" page, make up your own User ID and password and be sure to memorize or write it down for future use. Complete the rest of the boxes marked with an asterisk *.

6. If you are already a registered user, fill in the following information:

User Name:	
Password:	

7. After logging in with your User ID and password, you will be directed to the landing page that lists the five campuses (Police, Fire & EMS; Parks and Recreation; Administrative & Office; Managers & Elected Officials; Public Works & Utilities).

8. Click on one of these campuses to see the course listings for that category. **On the left-hand side are the Recommended Courses; these are free. **On the right-hand side are the Electives; these are available at a cost.

9. Click on a course title to see a description and enroll.

10. Click on the Enroll button to sign up for the course.

- 11. Click on the My Courses tab at the top of the page to see authorized courses.
- 12. Click on an individual course to see the status.
- 13. Click on Lesson Name to enter the course.

14. Click on Student Center to view your transcript and for printing certificates.

15. If you experience any difficulty or if you are a registered user and have forgotten your User Name and/or Password, call the Online University Administrator for your entity.

Back Safety

Course Code:	BS09
Credit Value:	1.0
Catalog:	Health & Safety
Category:	Back Injury Prevention
SubCategory:	General
Length:	30 Minutes [0.50 Hours]
Language:	English

This course, designed for supervisors, covers general back safety awareness information regarding job specific hazards, safe work practices, and ergonomics. Topics include basic risk identification skills, conducting ergonomics assessments and health screenings, and engineering controls available for implementation. This course primarily covers OSHA 29 CFR 1903.1.

General Ergonomics

Course Code:	ER09
Credit Value:	1.0
Catalog:	Health & Safety
Category:	Ergonomics
SubCategory:	General
Length:	30 Minutes [0.50 Hours]
Language:	English

This course addresses the key components of an ergonomics program identified by OSHA in the DRAFT Ergonomics Standard and the NIOSH manual "Elements of Ergonomics Program." It includes information regarding the risk factors, signs, and symptoms of workrelated musculoskeletal disorders (MSD).

PowerPoint Resources

Classroom Safety Series Power Point Presentation

Back Safety by Willis Pooling Loss Control Copies sent to all members in 2007

Classroom/Power Point Presentations - available with script for member use or for on-site training provided by a Loss Control Representative.

"Back Injury Prevention" prepared by John Colvin, CIRSA Senior Loss Control Representative. This is a presentation on proper body mechanics and the physiology of the back and surrounding muscles used for lifting. There are also demonstrations of how to utilize various lifting techniques and material handling equipment considering awkward loads or obstructions.

Resources and References

o U.S. Department of Labor, Bureau of Labor and Statistics www.bls.gov

> Nonfatal Occupational Injuries And Illnesses Requiring Days Away From Work, 2007

http://www.bls.gov/news.release/pdf/osh2.pdf

- o Mayo Foundation for Medical Education and Research www.mayoclinic.com
- o National Institute for Occupational Safety and Health (NIOSH) www.cdc.gov/Niosh/

Back Belts, Do They Prevent Injury? DHHS (NIOSH) Publication No. 94-127, October 1996 http://www.cdc.gov/Niosh/backbelt.html

Elements of Ergonomic Programs, A Primer Based on Evaluations of Musculoskeletal Disorders, March, 1997, DHHS (NIOSH) Publication No. 97-117 http://www.cdc.gov/niosh/97-117pd.html

o CIRSA, Body Mechanics, Ergonomics, & Physical Fitness Handbook

o University of Minnesota, Environmental Health Sciences, PuBH 5120, Back Injuries in the Workplace

http://enhs.umn.edu/current/2004injuryprevent/back/backinjury.html

o The National Alliance for Insurance Education & Research, Certified Risk Managers International, <u>Control of Risk</u>







Instructions For Supervisor's Investigation Report

The following information should be used to complete the Supervisor's Accident/Incident Investigation Report. This report should be filled out as soon as possible by the immediate supervisor of the department involved, and upon completion should be sent to the entity employee responsible for filing formal claim notices with CIRSA (or other appropriate claim handler).

This report is designed in a general format that is suitable for use on accidents involving employee injury, vehicular damage, property damage, or general liability. This form should also be utilized for reporting incidents or "near-misses" that may not result in actual injury or physical damage. Near miss incidents may signify there is an unsafe condition waiting for a more severe event to happen, and if properly investigated, the incident may be prevented.

Should additional space be needed when completing this report, please attach the information securely and make a note on the original form referencing the attached material.

1. Entity: State the name of the entity for which this report applies.

2. <u>Date</u>: Record actual date of loss not the date on which the report is being completed.

3. <u>Time</u>: Time at which the actual loss occurred.

4. <u>Name</u>: List name(s) or description of item(s) involved.

5. <u>Department</u>: Indicate under which department and if applicable which shift the incident occurred.

6. <u>Location of Incident</u>: Indicate the actual physical location of the incident. (i.e. shops, water plant, park, etc.) and provide the address.

7. <u>New Employee, Equipment or Operation</u>: Indicate if there was a new person, piece of equipment, or procedure involved.

8. <u>Type of Incident</u>: Classify the incident as accurately as possible, and check all that apply. There may be several areas involved;

** A fire in an entity's building injuring a private citizen and several employees. This could involve five or more claims including property, equipment, fire, workers' compensation, and public liability.

9. Be aware that the report likely is a public document and its content could affect the entity's liability for damage to property or injury to persons. If the accident/incident has resulted or may result in injury or damage to persons or property other than your entity's, please contact your Risk Manager, internal Claims Coordinator, or Entity Attorney prior to the completion of this form.

10. <u>What Happened</u>: Describe the event or series of events that resulted in the incident or accident. Include all people or property involved, damaged, lost, etc. including items

from other departments or private property. Be as specific as possible and include any relevant events occurring prior, during or after the accident/incident. Use only facts and do not submit the opinions of yourself or others.

Determine from the available evidence why this accident/incident occurred; utilize the six action words to assist you in thinking through the situation. When completing this section, consider information such as the following examples.

- ** Reporting any faulty equipment or lack of proper equipment.
- ** Noting improper or unsafe working conditions such as slippery floor, icy roads, liquid spill, poor housekeeping, missing warning signs. Again avoid placing blame on any individual or entering personal opinion. Concentrate on the facts.

11. <u>What Should Be Done To Prevent a Recurrence</u>: To prevent a recurrence, determine what actions, if any, are required to eliminate the hazards involved and restore safe working conditions. By using the words to the right of this space, evaluate if examples such as the following will reduce the possibility of a recurrence.

- ** Additional training.
- ** Increased equipment maintenance.
- ** Improved material handling.
- ** Re-selection of equipment, material, or people, etc.

The categories of Administrative/Management, Environment, Equipment, Material, and People are a breakdown of the five main variables in the work place, and listed under these variables are the supervisory inputs that affect them.

Examples include:

- ** If there was an accident involving Administrative/Management policies or procedures, these should be reevaluated to determine if changes in the policy or procedure, scheduling, purchasing or logistics are needed.
- ** If there was an accident involving Environmental factors, determine if weather, housekeeping, noise, light or chemicals are involved and how they effected the situation or could be changed to reduce the possibility of another accident.
- ** If there was an accident involving Equipment, you would study the effect that Selection, Arrangement, Use, and/or Maintenance, Availability, Convenience, or Appropriateness of that piece of equipment had in causing the accident.
- ** If there was an accident involving Material, determine if the Selection, Placement, Handling, Processing, and /or Availability of the material contributed to the accident.

** If there was an accident involving People, determine if a change in the Selection, Placement, Training, and/or Coaching of these people would have avoided the accident or may prevent a similar future accident.

12. <u>What Actions Have Been Taken</u>: Have any changes or improvements been made to remedy the situation? If an extremely hazardous condition is discovered, immediate action should be taken to prevent further loss. Take or recommend action consistent with your authority. Regardless of the type of hazard, documented follow up action is important to determine if the hazard is being adequately controlled. While documentation cannot be included in this section due to the timeliness of reporting, the plan for follow up action should be listed.

Examples include:

- ** New machine guard in place and weekly inspections started to verify guard use.
- ** Driver enrolled in defensive driving course and supervisor will perform monthly road observations.
- ** No smoking policy established for city shop and on-site supervisors will enforce.

13. <u>How Will Corrective Actions Improve Conditions or Behavior</u>: After determining the action to be taken, describe how this will improve the situation by eliminating or controlling a particular condition or behavior.

Examples include:

** New chairs have been ordered for City Hall that will provide improved back support.

- ** A body belt has been installed in the "cherry-picker" to prevent workers from falling.
- ** A physical fitness program has been mandated for the Police Department to improve strength and flexibility.

14. <u>Investigated By</u>: Name and title of supervisor who is completing this report and the date on which it was completed.

15. <u>Reviewed By</u>: Name and title of person to which this form is reviewed (usually risk manager, department director, personnel manager, clerk, or whomever is responsible for handling safety, claims, and insurance for the entity).