

# BACK SAFETY IN-SERVICE

## INTRODUCTION

Many times back pain can be directly traced to the ergonomic hazards of your job as a home healthcare worker. These hazards may include frequent bending, twisting, lifting, pushing, pulling and other forceful or repetitive movements. Over time, these hazards can cause injuries known as cumulative trauma disorders (CTDs). CTDs are caused by repetitive wear and tear on tendons, muscles, related nerves and bones. They may show up as pain or injury in the back, neck, shoulders, elbows, wrists or hands.

You can prevent CTDs by applying ergonomic principles to the tasks you perform everyday. Ergonomics helps you design your job to fit your body—thus putting as little strain on your body as possible.

All healthcare workers who lift and transfer clients are at great risk for back injury. According to the Bureau of Labor Statistic, nurses and personal care workers (including home healthcare workers) have a higher incidence of injury on the job than do miners and construction workers. In fact, the incidence of injury is more than twice that of miners and almost 1.5 times higher than construction workers. These injury rates are mainly due to the ergonomic hazards you face when lifting and transferring clients.

But as a home healthcare worker, your risk for back injury is even greater due to repeated lifting and transferring of clients in the home environment. You are at additional risk because you are usually working on your own.

When you lift to transfer a client, the risk of injury to your body is caused by:

- The mechanical stress of the lift
- The awkward position of your trunk
- The unpredictable movements of the client
- An awkward or crowded space

Due to unpredictable movements and the awkwardness of the load, a client is riskier to lift and transfer than a box of equivalent weight. Crowded spaces and cluttered rooms also make it more difficult to lift and transfer clients, thus increasing your ergonomic risk for back injury. The repeated lifting and transferring of clients can result in injury along the length of the spine, in the neck, the shoulders and the lower back.

## PREVENTION OF BACK INJURY

Despite all these risks, you can protect your back by following some simple safety principles and by using common sense. Your body is built to sustain big workloads, if you use your body safely.

- Maintain good posture
- Use safe body mechanics
- Use protective lifting devices
- ACT** safely during the lift and transfer
- Keep physically fit.

### PROPER POSTURE

Maintaining proper posture puts the vertebrae and the surrounding muscles in the best position to do work safely. Your vertebrae are naturally aligned with a gentle curve inward at the neck (cervical area), a curve outward at the chest (thoracic area) and another curve inward at the lower back (lumbar area).

To align your posture, take this stance: head up, shoulders back, and chest out, stomach in, buttocks tucked. Now, tense your body muscles, and then relax them with some shaking motions. Finally, let your body adjust to a neutral position. The neutral position is the safest position for you body during work.

### SAFE BODY MECHANICS

Keep a safe, neutral position during work.

Keep loads close to your body. If you lift 50 pounds with your arms away from your body, the force of the load on your back will equal 500 pounds.

Bend at your hips and knees, not at the waist.

During the lift, contract your stomach muscles to protect your back. Use the force of your leg muscles to do the work—not you back and arms.

Avoid twisting motions. They misalign your back and increase the risk of injury. Instead, take small steps and pivot.

Avoid overreaching, whether up, down or across. Use a step stool to reach something high. Organize materials ahead of time for easy access.

Don't lift objects placed above shoulder height or below the waist. Raise or lower yourself before lifting them, or place the objects to be lifted at the safe height. Always keep your working surface slightly higher than waist level to avoid back strain.

Don't lift a load that is too heavy for you by yourself. Find a way to lighten the load or arrange for a partner to help you.

## PROTECTIVE DEVICES FOR LIFTING

Using client transferring devices has been shown to greatly relieve lower back stress and reduce worker injury by:

- Eliminating manual lifting and transfers
- Reducing the number of client transfers needed per task
- Eliminating manual transfers in a confined workspace such as a bathroom.

Protective devices

- include: Transfer belts
- Hoists
- Walking belts with handles
- Shower chairs
- Repositioning devices
- Weighing devices.

Use a transfer belt to assist you when transferring clients who cannot help you move them. A makeshift belt can be made with a sheet. These belts enable you to hold on to a client securely during the transfer.

Encourage the installation of trapeze bars and safety bars in areas where transfers occur to help protect you and the client.

## SAFE LIFTING AND TRANSFERRING

Because lifting and transferring clients pose the greatest ergonomic threat for home healthcare workers, learn to **ACT** safely.

**ASSESS**

**CREATE**

**TRANSFER**

**Assess the situation for hazards before you begin.**

Identify hazards like crowded areas, very heavy loads and situations where special lifting assists are needed.

Observe the client's size, health condition, hearing or visual limitations and his or her ability to help. A client's assistance can make the difference between a manageable load and a hazardous load.

Talk the client through all lifts and transfers. This helps the client to feel less anxious and to cooperate with you.

**Create a safe workplace.**

Organize your space so that everything you will need is accessible.

Place equipment where it can be reached easily.

Create a big enough space for safely lifting and transferring the client. Decrease

clutter. Move furniture out of the way.  
Make sure the bed and chairs are stable before you begin lifting so that you avoid unpredictable movement.

### **Transferring the client.**

Tell the client what you plan to do.

When necessary, move the client to the head of the bed for easier access and to align their weight.

Elevate the head of the bed to help you move the client from a reclining to a sitting position. Use pillows if necessary.

Secure transfer belt onto client.

Put slip resistant footwear on the client.

Place the transfer chair close to the bed or client.

If a wheelchair is used, remove the armrest nearest the client and remove both footrests so they won't trip you.

Lock all wheels to control movement.

Move client to the edge of the bed, couch or chair first to avoid unnecessary bending and awkward postures. Move one part of the client's body at a time. First move the head and shoulders, then the buttocks and finally the legs and feet. Keep your knees and hips slightly bent, your head up, your back aligned and your stomach muscles contracted—and stay low.

Get in close to the client and keep the client stabilized at all times.

On signal, move the client to a standing position by pulling on the transfer belt and straightening your knees. With debilitated clients, it may help to rock them back and forth to gain the momentum necessary to reach a standing position.

With the client standing, pivot toward the chair by taking small steps and staying close to the client. Don't twist.

Lower the client into the chair by bending your knees. A client may hold onto your waist or shoulders but not your neck.

Use smooth movements, not rough, jerky motions.

## **FITNESS**

As you probably know, keeping your body fit is one of the best things you can do to protect your back. Strong muscles, limber joints and overall fitness can keep you from hurting your back. To keep fit, follow an exercise program that includes:

**Aerobic activity for at least 20 minutes 3 times per week**

**Muscle strengthening exercises**

**Flexibility exercises**

### AEROBIC ACTIVITY

Brisk walking is excellent for your back. Swimming is also good if you avoid taking strokes early in your training that can injure your back, such as the breaststroke and butterfly. Check with your doctor before starting a program, especially if you have back problems.

### STRENGTH

Exercises that focus on strengthening your upper body, abdomen, pelvis and thighs will help to protect your more vulnerable back muscles. Using a weight circuit that isolates the muscle groups is an excellent method for strengthening your body. Make sure you breathe in and out evenly while exercising, keep your body in a neutral posture and repeat each exercise 8-10 times per set, working up to three sets per session.

#### Arms

Starting with arms straight out to the side at shoulder height, do the following exercises: Make small circle with your arms.

Bend your elbows and bring your fists to your shoulders

Bring your arms and hands together in front of you at chest height, bend your elbows, and lift elbows and arms straight up in front of you for several inches and then bring down to chest level.

#### Abdomen

Lie on the floor with your knees bent, your feet flat on the floor, your arms bent at the elbows and placed across your chest.

Raise straight upward from your shoulders, keeping your head parallel to the floor so that you are looking straight up at the ceiling. Keep your lower back against the floor.

Lower to your original position. Repeat with legs straight up in the air, hips bent at a 90-degree angle from the floor.

#### Legs

Stand with back flat against the wall and feet about one foot from the wall. Slowly sink down to a 45-degree angle.

Hold 10-15 seconds, and then slowly slide back up.

### FLEXIBILITY

Increase the flexibility of your back from the cervical to the lumbar areas with the following exercises:

### Neck

Turn your head to one side and hold before returning to start - repeat on the other side.  
Bring one ear toward shoulder and hold before returning to start - repeat on the other side.  
With two fingers, tuck chin toward chest and hold before returning to start.

Stand in a neutral posture with your head facing straight forward

### Shoulders

Lie on the floor with knees bent, back pressed against the floor and arms across your chest.

Press shoulder blades together and against the floor.

Hold for 8-10 seconds and then relax.

### Legs and Back

Lie on the floor with knees bent, abdomen contracted and lower back pressed against the floor

Bring one bent knee into your chest with gentle pressure from your hands clasped behind your knee. Hold for 8-10 seconds before returning to start.

Repeat with other leg. Then repeat with both knees pressed toward chest and hold before returning to start.

## **PROTECT YOURSELF FROM HAZARDS**

You can protect both yourself and your client by evaluating the client's home for ergonomic hazards, assessing the client's specific handling needs and developing a plan to safely handle that client. You can suggest changes in the home but can't demand them. Not all clients agree to move furniture in order to make space more workable, and some houses are too small to get furniture out of the way. You will need to devise methods of lifting and transferring when conditions are not the best. Use lifting devices to help you. Use a transfer belt for difficult transfers. Encourage the installation of trapeze bars and safety bars to help protect you and the client. Don't lift anything too heavy by yourself. If you can't lighten the load, arrange for a partner to help you.

### **Remember:**

Clients can fall unexpectedly for any number of reasons. If a client starts to fall, don't try to stop the fall. Grasp the client and, getting as close as you can, guide the client gently to the floor by bending your hips and knees. If necessary, get help to lift the client from the floor.

## **SUMMARY**

As a home healthcare worker, you are at a very high risk for back injury, due to the

ergonomic risks of lifting and transferring clients. Many times, just taking a few minutes to follow simple precautions can spare you agonizing back pain. Evaluate each home for hazards and find ways to minimize those hazards. Maintain good posture, use safe body mechanics and protective lifting devices, ACT safely when lifting and transferring clients, and keep your body fit so you can protect your back from injury.

**It's your back.**

SCORE \_\_\_\_\_

PASS \_\_\_\_\_ FAIL \_\_\_\_\_



## QUIZ

Please highlight TRUE or FALSE to indicate the veracity of the following questions:

1. Nurses and personal care workers have a higher incidence of back injury on the job than do miners and construction workers. TRUE FALSE
2. Cumulative trauma disorders like back injuries are often due to ergonomic hazards of your job. TRUE FALSE
3. Your body is built to sustain big workloads if you use your body safely. TRUE FALSE
4. If you try to lift a 50-pound load at arm's length, the force of the load on your back is the same as if you make the lift with the box close to your body. TRUE FALSE
5. The home healthcare worker can and should demand that certain changes be made in the home to make the environment safer. TRUE FALSE
6. Lifting and transferring of clients puts you at about the same risk of injury as lifting and moving a heavy box. TRUE FALSE
7. A confined or cluttered workspace and unpredictable client movement greatly increase your risk of back injury during lifts or transfers of clients. TRUE FALSE
8. If a client starts to fall, you should throw yourself between the client and the floor to protect the client. TRUE FALSE
9. Because you often work alone, it is important that you learn to lift all loads regardless of their weight. TRUE FALSE
10. It is your responsibility to evaluate your job for hazards and to correct them when possible. TRUE FALSE

By signing below, I certify that I have read and understand the training module re: back safety. I know to ask my supervisor if I have any questions regarding lifting and transferring techniques and back safety. I also certify that I have not received help from any other person in answering the quiz.

Employee Printed Name \_\_\_\_\_ Date \_\_\_\_\_

Instructor's Name \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_  
EMPLOYEE'S SIGNATURE

\_\_\_\_\_  
INSTRUCTOR'S SIGNATURE