

Safe Patient Handling Training

Instructions for a hands-on teaching approach

Use this script, examples, and demonstrations to reinforce the concepts and techniques recommended for safe patient handling.

Learning objective

Learn how to apply the principles of ergonomics and body mechanics when selecting the correct patient handling method to reduce the risk of injury.

Equipment

- Mechanical lifting devices used at your site (if you plan to demo them)
- Large bag of apples (or other bag of small objects, to use during the demonstration, with the total bag weight of about 5 pounds).

Before you begin

- Review the following training and understand that the italicized wording is a script you can use. You may change the wording to make it your own.
- Follow the sequence of this training. By covering all the concepts and completing the practical activities, you will re-enforce the learning objective.
- Use a training room with non-fixed chairs (for use while practicing skills).
- Gather equipment listed above needed for this training.
- Print or be ready to share digitally the <u>Tips for Patient Handling</u> to share with the class at the end of the training.

Start with a Demonstration - Introduction to body mechanics (ergonomics principles)

- 1. Ask a volunteer to come up. Hand them an apple and ask them to hold the apple in their outstretched hand. *How long do you think you can hold the apple out like this?*
- 2. Now, ask the group: What could they change so they could hold the apple ten times longer?
 - a. Expected answers to repeat and reinforce:
 - Bring the apple closer to their body.
 - Hold the apple in two hands instead of just one.
- 3. Now, hand the whole bag of apples to the volunteer and ask them and the group:



How long can you hold an apple in your outstretched hand?

- a. How long can they hold this whole bag with one hand extended?
- b. What would happen if you had a full 40-pound box of apples?
- c. What would happen if the box weighed more than you can lift?

Expected answers to repeat and reinforce.

- With the full bag of apples, they could hold it for much less time than the single apple. Maybe they would bring it closer to their body, about waist height. They might choose to use both hands to hold the bag.
- With the full box, maybe they would bring the box closer to their body at the waist, while holding it underneath for better support.
- If the box were too heavy for them to lift on their own, maybe they would ask for help.
- Maybe they could they get a cart with wheels to help move the box.
- Maybe they would they ask a friend for help so that two people could lift the box together.
- If the apples were in a crate so large that two people couldn't move it, then you might need to use a forklift.

Transition from apple demonstration to discussion and practice of these concepts with patient handling.

Think about how much more your patients weigh than a box of apples. In the same way you problem-solved how to hold the apple or move the box of apples in better ways, I want you to think about better ways to move or lift your patients.

Ask some questions for reflection.

- What could we change about where we are placing our own bodies compared to where the patients are?
- Do the patients weigh too much for us to handle by ourselves?
- When should we ask for help?
- Do the patients weigh too much for two people to lift?
- When should we get the mechanical lift?

In the next section, we will discuss the answers to these questions. We will also review the recommended equipment to



Crate of apples requires a forklift to move.

use, starting with the most effective, that can prevent lifting injuries. We will learn how using some of these same concepts, like how bringing the bag of apples closer to their body lengthened the amount of time our volunteer could hold the bag of apples, can be used to help us handle our patients more safely.

1. Use assistive devices whenever possible to avoid lifting.

To protect yourselves from injury, the best method is not to lift your patients. A <u>study published in the American</u> <u>Journal of Nursing in 2007</u>, used the <u>revised NIOSH lifting equation</u> (which was designed to calculate a recommended weight limit for manual material handling tasks) to show a recommended 35-lb. maximum weight limit for use in patient-handling tasks. This is the amount of force required to lift a human leg. When the required weight for lifting exceeds this limit, you should use assistive devices. Therefore, whenever possible use a mechanical lift, especially with patients who are unable to help with standing or transfers.

(Take the time now, if you have mechanical lifting assistive devices in your facility, to provide training and practice transfers with your employees. Practicing these skills will increase their level of comfort while using the equipment)

Mechanical lifts and other assistive devices can take the load required for lifting down to zero.

- Make sure that you know the location of these assistive devices in your facility.
- Make sure that you receive proper training in use of your equipment and practice with someone experienced. Each device is slightly different in how they function, so it is important to learn about the ones you have available for your use.
- Do not be afraid to ask for instruction and help.

Get very comfortable using equipment.

This technique is like using the cart with wheels, or the forklift, to help you move the large crate of apples. Even if the patient's weight exceeds your lifting strength or ability, using the mechanical lift makes it possible to move your patients easily and safely.

2. Use two people for lifting to reduce strain and overexertion.

Just like with the box of apples, if two people are working together, then the box only weighs half as much to lift. This is an easy way to reduce the forces required when lifting or moving your patients.

- Misjudging how much physical assistance will be required to provide patient care can lead to a serious injury. Do not hesitate to ask for help.
- It is important to communicate with each other. Make sure you both know what the plan is so that you work together. To avoid confusion, use an action word when counting for a lift. Such as, "one, two, lift". If someone does not lift when you expect, it can cause more harm than good, due to the inequality of the weight while lifting.
- Make sure that you have good communication with the patient. In this way, they can help assist you with the transfer instead of fighting against you. Patients who are afraid or in pain, will cooperate more if they understand the plan and know what to expect.

3. When assisting patients to stand or transfer, bring the weight of patient forward in the chair.

Try this activity:

- 1. Scoot all the way back in your chair and lean on the backrest. Now, without changing position, try to stand up. You won't be able to.
- 2. Now, try this. Scoot forward in your chair so your feet are firmly on the ground. Rest your hands on your thighs. Lean forward bending at your hips so your head and nose move forward in front of your toes. What do you feel happening in your legs? Are the muscles tightening, getting ready to move? What about the weight on your hips and buttocks? Is the weightlifting, or even starting to rise? I didn't say you were going to stand up, but the muscles in your body started getting ready, just in case.
- 3. Think about a patient sitting in a wheelchair that needs to stand up to walk. Could you use this idea to assist them to stand up more easily? Yes!



Aide assisting patient to standing while encouraging leaning forward technique.

What is happening?

- The reason this happens, is that the location of the concentration of mass, or the center of gravity, in the human body is generally located right at the hips, behind the belly button. This makes the hips the most difficult or heavy part of the body to lift when helping someone to stand up.
- 2. By guiding the patient to lean forward at their hips, bringing their nose forward, the center of mass moves forward, and the hips/buttocks rise more easily.

Practice this technique in pairs.

1. Now, get into pairs. I want you to assist someone to stand up by just guiding his or her shoulders. If you guide them forward with your hand on their shoulder, and they bend their hips while bringing their nose forward, they will at least feel their hips begin to rise. When guided properly, the person will just stand up. Of course, you are all healthy and can stand up on your own but isn't it amazing that you do not have to lift at all. You are just guiding the action.

- It is also important to remember, during this task, not to get in the way of your patient's movement. If you are
 "blocking" their way by standing in front of them, they cannot lean forward or stand. Instead, try standing to
 the side of the patient.
- 3. You can use this technique to assist your partner to transfer from one chair to the other. Place your chairs right next to each other, and gently guide your partner forward. When their hips begin to rise, pivot them quickly over to the nearby chair.

4. Transfer towards the stronger side of patients with one-sided weakness.

If a patient has had a stroke or other malady, resulting in one side of their body being weaker than what the other is, take the time to set up the wheelchair or chair on the stronger side of the patient. In this way, the patient is able to pivot or turn using their stronger side to assist you during the transfer. Remember to switch positions of the chair when helping the patient return to the bed so you are still transferring towards their stronger side.

5. Lay bed and patient flat before assisting them to slide up in the bed.

Gravity is the force that causes patients to slide down toward the foot of their bed during the day. Before assisting a patient back up toward their pillow, roll the head of the bed flat. Communicate with the patients what you are doing and ask them to help you if they can.

- To reduce the forces you have to move, have the patient assist. If they are able, have them bend their legs and push with their feet to help, while you slide them up in the bed.
- If using a draw or slip-sheet, hold the sheet close to the patient at the level of their hips, where the center of mass is located, and while facing the patient with your toes pointing towards the head of the bed, slide them up.
- If someone is too heavy to slide up or cannot help you, then you need to ask for help. This job is easier with two people, one on each side of the bed.

6. Get close to the patient when helping them roll onto their side.

Just like with our example of how to hold an apple longer, bringing the weight of the patient closer reduces the forces to make it easier to move them.

- Pushing is easier on your body than pulling. When it is safe to do so, choose to push the patient away from you, towards the guardrail, instead of pulling them towards you.
- If possible, bend the patient's top leg at the hip and knee and use it, as a lever to assist them in rolling their hips over which reduces the forces required for you to push.
- If practical, place a knee on the bed near the patient to maintain the curves in your back and get closer to the patient you are moving.
- Again, if the patient is too heavy to move, get help and work together to reposition them.



The patient is too far away from the caretaker on the right, leading to risk for back injury.

7. Wrap up training.

Print or share digitally the Tips for Patient Handling as a reminder of the material covered during this training.

Thanks for your participation during this class. Understanding how your body works and some different ways to position yourselves, and your patients, will reduce the amount of force required and your risk for injury. Don't hesitate to ask for help. Working together is a good way to reduce the amount of weight you need to lift or move. In addition, and most importantly, make sure that you know where the mechanical lift equipment is stored and how to use it, so that you will not lift patients that are too heavy for you to move.

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