

HANDOUT

Back Safety Training

Learner edition · 51 slides · 10 knowledge checks

Name _____ Date _____

1. A Review of Safe Lifting Techniques

Back Safety: Return To Work Programs and Safe Lifting Techniques

Section 3: A Review of Safe Lifting Techniques

[user name]



Notes

2. Introduction

Introduction

After a brief review of safe lifting techniques and signs that a patient is exerting themselves, you will watch a number of videos that also review safe lifting techniques.

Because our patients are so unique, and each will have their own demands and deficits, it is important to take your existing knowledge with any learned in this course and apply it to each individual patient.

Notes

3. Correct Neutral Posture

Correct Neutral Posture

OSHA (Occupational Safety and Health Administration) defines correct neutral posture as follows:

“(The correct) postures where the body is aligned and balanced while sitting or standing: the head is kept upright and is not turned to either side more than 30 degrees or tilted forward or backward more than about 15 degrees.

When the worker is standing, the torso is not bent more than 10 to 20 degrees from the vertical position and the natural curves of the spine are maintained.

The pelvis and shoulders should face straight ahead to avoid twisting the torso.

The shoulders are relaxed and knees slightly bent.

The arms hang normally at the side, with elbows close to the body. "

Notes

4. OSHA Definition (cont.)

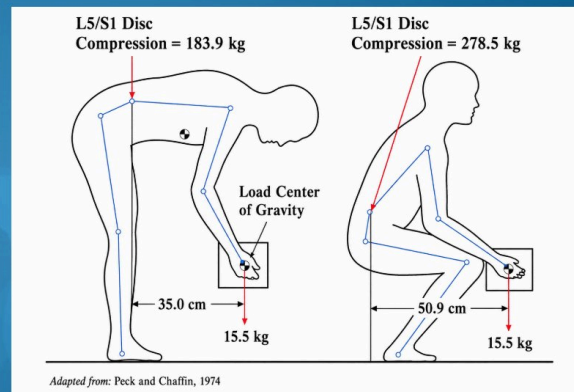
OSHA Definition (cont.)

“The elbows are not bent more than about 90 degrees and the palms face in toward each other and the center line of the body.

The wrists are in line with the forearms and are not bent sideways, forward (towards the palm), or backward (towards the back of the hand.)

When the worker is seated, the buttocks and feet are firmly supported.”

OSHA Ergonomic Principles Index (Lifting)



Notes

5. Planning a Lift

Planning a Lift

Safe lifting requires PLANNING:

- Assess the load and check overall condition;
- Check route for obstacles and a clear path (be careful in a busy setting--this can change quickly);
- Use mechanical aids when possible;
- Break down large and heavy loads (avoid the “lazy-man-load,” where you try to carry as much as possible to decrease the number of trips you have to make);
- Know your limits;
- Seek help if necessary; and
- Use extra caution with awkward loads/lifts.

Notes

6. Safe-Lifting Leverage

Safe-Lifting Leverage

The optimum safe lifting zone is close to the body, between mid-thigh to mid-chest height.

This is the safest area for lifts, because this is where a person's upper body and back muscles can lift the most with the least amount of effort.

Keep the object as close to the body as you are able to (decreasing torque on the body).



Notes

7. Safe Lifting - Trunk Alignment

Safe Lifting - Trunk Alignment

For safe lifting, the vertical trunk alignment should be within 10 degrees of vertical.

The spine should be straight (normal curvature of the spine).

Vertical trunk alignment is not always possible, and when it isn't, make sure the spine is straight.

If possible, do not rotate the trunk.



Notes

8. Safe Lifting - Speed

Safe Lifting - Speed

Excessive speeds with lifting should be avoided due to increased **peak spinal compressive force**.

These forces are most noted at the L5/S1 vertebral segment, aka the lumbosacral joint (*Greenland, 2013*).

Lifts that are too slow can also be dangerous.

Cumulative spinal compressive loading forces are much greater with slower lifting tasks.

Some research suggests that faster lifting of heavy objects would reduce the exposure time, and is likely less hazardous than slow lifting (*Greenland, 2013*).

However, most feel that a moderate pace is best when performing a dynamic lift.

Notes