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## Introduction to Safety – Unit Eight: Ergonomics

### Lab 2: Back Safety

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Student Name: \_\_\_\_\_

#### Description of Topic

- When heavy objects need to be lifted, they should be done by forklifts, hoists, dollies, and other types of equipment. However, there are times that it is necessary to load or unloaded objects and materials by hand.
- One of the most common injuries that occurs in the workforce is to the back. It can range from a spasm or pulled muscle to a ruptured disk. An injury to the back can be minimized by using common sense by being in good physical shape to do lifting by using a back brace, and by using proper techniques. In this lab exercise, you will be required to demonstrate both proper and improper techniques of lifting a box off of ground level.

#### Materials Required

- Empty Box 2'x2'x3' (high)
- Back Brace
- Cart with rollers (mechanical caddy)

#### Objective

- The student will demonstrate their knowledge on proper and improper techniques when lifting objects off a floor and moving heavy objects on a cart.

#### Lab Assignment A

- After attending a lecture on back safety or completing the reading assignment on their topic, you will be required to give a demonstration to your instructor that shows your knowledge about properly and improperly lifting techniques. Make sure you do the proper research on this topic and rehearse your presentation before making an appointment with your instructor. The presentation should include:
  - Evaluating how heavy the object is.
  - Determining the path on which you will carry the object
  - Using an empty box, demonstrate the proper techniques of lifting and setting down the box
  - Movements to avoid while the box is lifted
- How to move the box when it is on rollers.





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#### Grading Rubric

Below is an example of a rubric to implement when evaluating the performance of individual students for each of the laboratory exercises.

	Excellent 5 pts	Good 4 pts	Fair 3 pts	Poor 2 pts	Unacceptable 1 pts	Grade Received (N/A)
<b>Ability to Follow Directions</b>	Excellent Followed directions to the letter.	Good Followed directions.	Fair Moderately followed directions.	Poor Did not follow directions.	Unacceptable Did not appear concerned with directions.	Grade Received
<b>Demonstrate Knowledge of Tools</b>	Excellent Student knows and is able to identify and explain necessary tools for completion of the project.	Good Student is able to identify and explain necessary tools for completion of the project with some assistance.	Fair Student is unable to identify or use tools without major prompting.	Poor Student is not able to both identify and use tools.	Unacceptable Student's use of tools posed a danger to self and others.	Grade Received
<b>Level of Needed Assistance</b>	Excellent Student was able to complete the task without assistance.	Good Student was able to complete the task with little assistance.	Fair Student was able to complete the task with moderate assistance.	Poor Student was unable to complete task without major assistance.	Unacceptable Student was unable to complete task with assistance.	Grade Received





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	Excellent 5 pts	Good 4 pts	Fair 3 pts	Poor 2 pts	Unacceptable 1 pts	Grade Received (N/A)
<b>Student Preparedness</b>	Excellent Student had/gathered all materials and was completely ready to go to work.	Good Student had/gathered most materials and went to work.	Fair Student had/gathered most materials, however, they needed excess time to do so.	Poor Student did not have/gather some of the needed materials to perform work.	Unacceptable Student did not have/gather the needed materials and was unable to perform work.	Grade Received
<b>Time Management</b>	Excellent Routinely used time well throughout the project to get the job done on time.	Good Used time fairly well throughout the project.	Fair Procrastinated somewhat but did get the job done on time.	Poor Was unable to adequately meet timeline due to inability.	Unacceptable Did not meet timeline due to procrastination or wasting time.	Grade Received





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