



Lifting Techniques

Preventing Back Injury in the Workplace

University of Louisiana – Monroe
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Lifting Process

BEFORE YOU LIFT

- Plan Your Route: Path clear? Trip hazards removed? Dry?
- Assess the Load: Too heavy? Can I use a hand truck or forklift? Can I slide it?

WHEN YOU LIFT

- Lift It Right: Position your body close to the object. Keep your back straight.
- Move It Right: Don't twist your back.
- Lower It Right: When you put the load down, bend your knees not your waist.

GET HELP IF YOU NEED IT

- Work Together: Don't be a hero. Communicate with your partner!

Plan Ahead



- Size up the load:
 - Can it be split into multiple loads?
 - Smaller loads cause less strain on the back.
 - Can you slide it rather than lift?
- Use material handling equipment if load is too heavy:
 - Forklifts
 - Hoists
 - Dollies
- Avoid using lower rack for moderately heavy to heavy items or awkward items.
- Get help when lifting heavy, awkward, or long items.

Basic Rules of Good Lifting



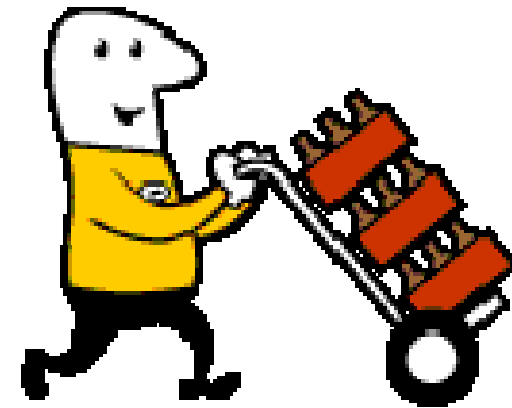
- Size up the load before you lift.
- Can you lift a corner?
- Can you get to the item?
- Do you need to move something to gain better access?
- Bend your knees.
- Get a good hand hold.
- Center yourself over the load.
- Lift straight up - let your legs do the work.
- Don't twist or turn.





Basic Rules of Good Lifting (cont.)

- Have a clear path.
- Set the load down properly.
- Always push a cart or dolly.
- Get help for long loads.
- Split up heavy loads when you can.
- Pushing a load is easier on the back; easier to control.





Never Twist or Turn When Lifting

- Adds strain to the back's discs, muscles, ligaments, tendons.
- Plan your lift to avoid awkward positions.
- Set load down if you're losing your grip.
- Don't twist and turn or juggle load to regain grip.
- Keep back as straight as possible.





Carrying The Load

- Ensure a clear path.
- Ensure a place where load can be set down.
- Check for stability of load.
- Can you get a good grip?
- Use mechanical equipment if load is too heavy.
- Get help if load is too heavy - lift at the same time to keep load balanced.





Lowering the Load

- Bend the knees to let leg muscles support the weight.
- Slowly lower it; do not drop the load.
- Avoid sudden movements.
- Lower the load at the same time if working with a partner.





Awkward Lifting

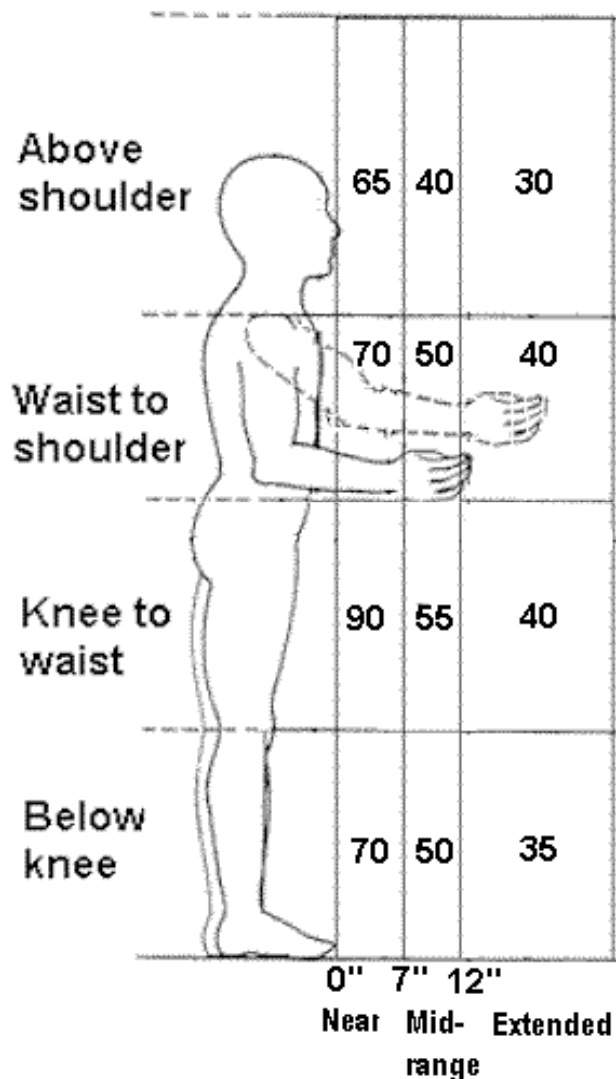


Lifts that are:

- Above the shoulders
- Below the knees
- At arms' length



Analysis Tools



- The closer to the body the more Strength you have.
- L&I Lifting Calculator
- Other tools:
 - American Conference Group of Industrial Hygiene (ACGIH) Lifting Threshold Limit Value (TLV)
 - National Institute of Occupational Safety & Health (NIOSH) Lifting Equation



Principles for Reducing Heavy Lifting

- Reduce the weight
- Increase the weight (to balance load)
- Use mechanical assistance
- Slide instead of lift
- Team lifting





Principles for Reducing Frequent Lifting

- Use mechanical assistance
- Avoid unnecessary lifting
- Use mobile storage shelves





Principles for Reducing Awkward Lifting/Reaching

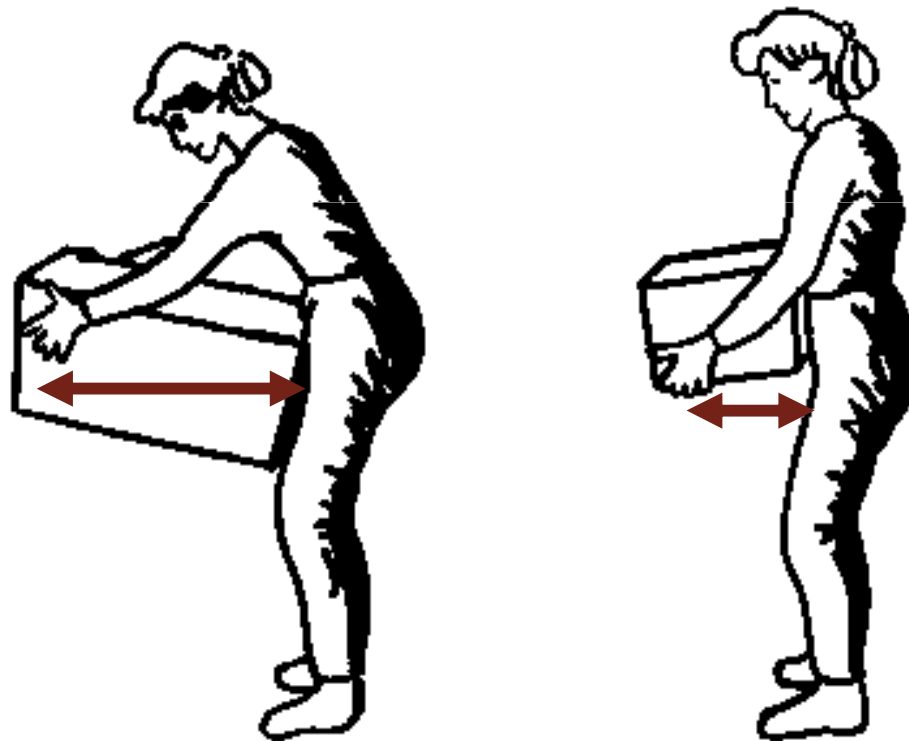
- Remove obstacles
- Slide closer
- Reduce shelf depth
- Reduce package size
- Use mechanical assistance
- Team lifting



Reducing Awkward Lifting/Reaching



Reduce package size





Principles for Reducing Awkward Lifting/Bending

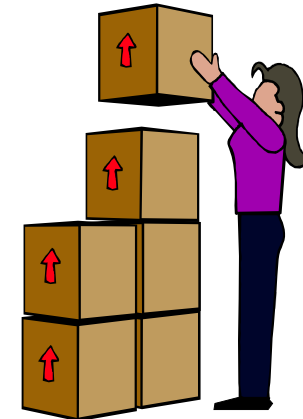
- Use mechanical assistance to raise the load
- Add handles
- Arrange storage
- Avoid unnecessary lifting





Reducing Awkward Lifting / Reaching Above Shoulders

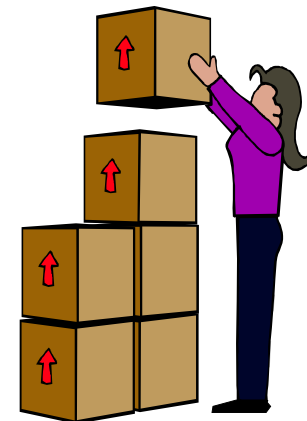
- Arrange storage
- Use mechanical assistance
- Use a rolling stair or “safety ladder”





Other Factors in Back Injuries

- Age of employee
- Improper postures when sleeping, standing, sitting
- Physical condition of employee
- Repetitive motions





Report any accident/incident immediately using the proper Forms (DA2000 for employees; DA3000 for guests, students, and vendors).

**Contact the ULM Safety Office at 342-5177
ULM Police 342-5350**