Preventing Lifting and Overexertion Injuries for Trainers and Supervisors

Objective: Lift properly to minimize risk of injuries.

**Trainer’s Note**

Problems and injuries can arise from overexertion. For this module:

- Review the information on lifting, lifting hazards, and safe lifting.
- Describe jobs that might result in overexertion.
- Ask a worker to demonstrate appropriate lifting techniques.
- Cover some practical tips to avoid overexertion.
- Review the important points.
- Have workers take the True/False quiz to check their learning.

**Background**

Approximately 25 percent of workplace injuries result from lifting, pulling, or pushing objects. The part of the body most often injured is the back.

**Material Handling — Think Before Lifting**

- Arrange your package delivery and material handling systems so that heavy loads are lifted and carried near the waist, between knee height and shoulder height.
- When possible, set heavy objects on pallets, benches, or other supports near waist height — not on the ground. It is impossible to achieve a good back position when lifting heavy objects from the ground.
- Have a handling plan that avoids slippery hazards and includes a destination.
- Test the load to be sure that it can be safely carried.
- Know the limits! If the load is too heavy, awkward, or bulky to carry alone, get help.
- Use machinery or equipment, such as a pushcart, hand truck, wheelbarrow, forklift, or hoist.
- Do not overlook the use of levers, inclined planes, or rollers to move loads.

Serious back injuries occur because of improper lifting techniques, like these:

- Bending from the waist to pick up objects.
- Lifting boxes above the chest.
• Twisting the body to carry or lift a heavy box or object.
• Lifting objects when in poor physical condition.

Guidelines for Safe Lifting

• Use a proper lifting position. Lift with your knees and legs — not with your back.
• Get a good grip. Grasp the load firmly. Use gloves if they allow for a better grip.
• Get a good footing. Center body weight to provide a powerful line of thrust and good balance.
• Keep it close. Grasp the load firmly and lift towards the belt buckle. Hold the load close to the body to avoid putting pressure on the back.
• Lift smoothly. Raise, carry, and lower the load smoothly. Never jerk a load.
• Avoid twisting. If turning is required while lifting or carrying a load, move the feet to turn the body instead of twisting at the waist.
• Push. Push rather than pull the load.

Review These Important Points

• Approximately 25 percent of work-related injuries result from overexertion, mainly from lifting.
• Think and plan before lifting.
• Push rather than pull the load.
• Use mechanical means whenever possible.
• Avoid twisting when lifting or setting down a load. Move the feet to turn the body instead of twisting at the waist.
About These Modules

The author team for the training modules in the landscape and horticultural tailgate training series includes Dee Jepsen, Program Director, Agricultural Safety and Health, Ohio State University Extension; Michael Wonacott, Research Specialist, Vocational Education; Peter Ling, Greenhouse Specialist; and Thomas Bean, Agricultural Safety Specialist. Modules were developed with funding from the Occupational Safety and Health Administration, U.S. Department of Labor, Grant Number 46E3-HT09.

Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the U.S. Department of Agriculture or the U.S. Department of Labor.

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Preventing Lifting and Overexertion Injuries

True or False?

1. For best results, always pull rather than push a load.  
   T  F

2. Wear gloves if they allow for a better grip.  
   T  F

3. Approximately 25 percent of all injuries result from overexertion, mainly from lifting, pulling, or pushing objects.  
   T  F

4. Use mechanical means to handle materials when possible.  
   T  F

5. To prevent injuries, you should move the feet to turn the body instead of twisting at the waist.  
   T  F