

## Preventing Back Injuries in the Traveling Attraction Industries

Greetings everyone, Ladd here:

Unlike foot and hand injury campaigns that are primarily focused on PPE, back and shoulder injury prevention requires that lifting and carrying techniques be learned and practiced to be effective. This Safety Spot provides techniques, precautions, images and general information about these injuries in UTP's working environments. As workers new to the trade are most likely to be uninformed about manual load management techniques, it's advised that we review best lifting practice with all new hires.

### Back Injury Prevention:

#### **Why the principles of back injury prevention need to be reviewed and practiced often:**

- 1 in 5 U.S. workers suffers a back injury over his/her "on the job" life. Back injuries are the second most common cause of days away from work after the common cold.
- The Bureau of Labor Statistics reports there are about 200,000 reported back injuries each year resulting in days away from work with men and women equally affected.
- Back injuries are most frequently reported in working people beginning at around age 30. The frequency of these injuries does increase with age.
- Back injuries in UTP's younger workers are usually the result of being out of shape, poorly informed about lifting posture techniques, being careless, and taking the durability of the spine and its support systems for granted.
- Unlike long bone fracture sites that predictably heal with more certain outcomes, back injuries include a range of types, with no way to predict seriousness, or whether a particular event can be recovered to pre-injury functionality at all.
- Unlike the immediate feedback from a bumped head or smashed foot, the effects of poor posture, lack of conditioning, or careless lifting techniques are harder to detect and can compound over time. They may seem "just fine" until the moment conditions are right for injury.
- Injuries can range from a muscle strain, a ruptured or bulging disk, or a compressed or fractured vertebrae, with no forewarning of how serious the resulting implications might be. Strains may recover in a few weeks, while more serious displacements may result in surgery and even disability.
- *We all can minimize these outcomes with routine training reminders and by reminding stagehands of the impacts a back injury can have on the victim's ability to work and their quality of life in the post-injury months, and decades, ahead.*

# SAFETY SPOT

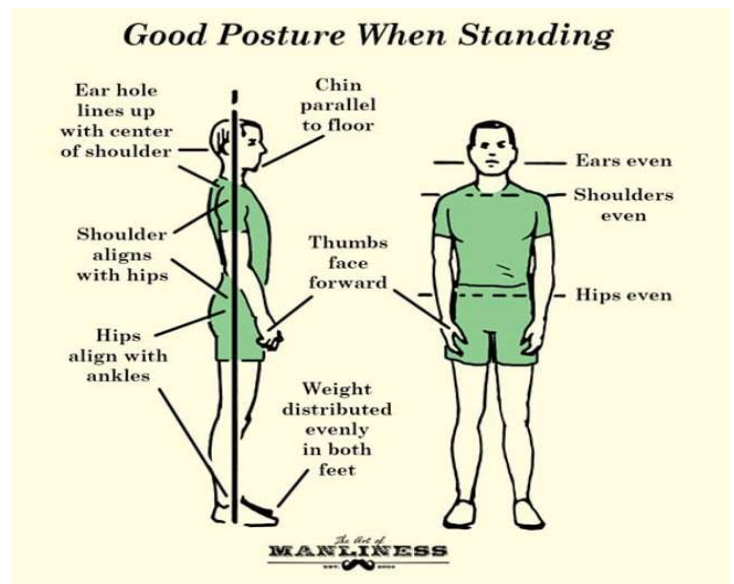
## Most cited contributors to Back Injuries:

Any combination of the following causes can set the stage for a back-related injury:

1. **Improper lifting:** Poor technique is the major cause of job-related back injuries across all venues, and often goes hand in hand with other contributing factors.
2. **Reaching, Bending, and Twisting:** When an employee reacts with sudden twisting or jerking movements this often puts the back muscles in a position where they are asked to do more than they are physically capable of handling and lead to serious injury. This may occur when using poor form, during a slip or fall, or a surprised attempt to stop a falling stack or object.
3. **Direct Impact Trauma:** Trauma resulting from things such as inadvertently stepping off an unprotected threshold such as a stair, a loading dock, staging or deckage edge have also occurred.
4. **Poor Physical Condition:** A body or back that hasn't been maintained by some form of relatable exercise is at risk. Much like heart failure, candidates can be surprised by the sudden onset of a back injury that's been building undetected for years.
5. **Poor Posture:** Over time poor posture can cause some support systems to relax and weaken, while also causing other systems to strain to compensate. Making a habit of good posture strengthens one's core, and upper and lower back supporting systems which helps prevent injury. To check for and practice good posture, stand with you heels 4" from the baseboard with glutes, shoulders and head touching the wall. Maintain this relationship as you step away.
6. **Other Health Factors:** As workers bodies age a natural part of that process is the potential for loss of strength. These losses can be partially mitigated by attempting to remaining in good physical condition, but it is important to remain mindful of what your body can safely accomplish. Second, excessive weight, especially when centered on the waist, can result in stress on the body-frame that can lead to injury as this can affect overall body alignment and center of gravity. Finally, an overlooked health factor is living a life on legs that are not effectively the same length, which can lead to long term health problems. It is advised to have your legs measured for differences in length and wear appropriate inserts that correct for disparities greater than 1/4" at all times!

### Tips for better Posture:

1. Keep your feet about shoulder-width apart.
2. Put your weight mostly on the balls of your feet.
3. Stand up straight and BE TALL.
4. Keep your shoulders back.
5. Pull your stomach in.
6. Keep your head level.
7. let your arms hang down naturally at your sides.



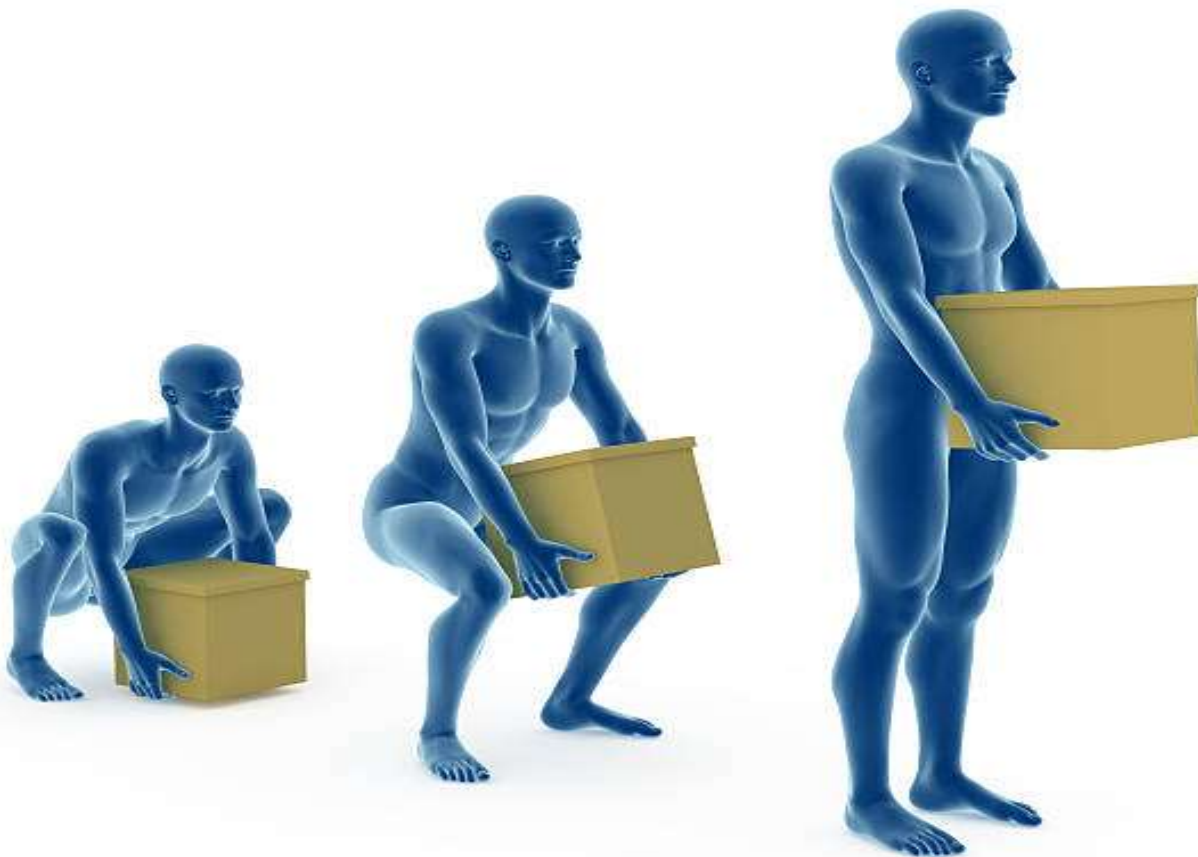
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## A Safe Lifting Protocol:

**Note:** Besides what is provided below there are dozens of versions on the internet to choose from. Meantime cutting and pasting the following steps and graphic can do for now. As uninformed employees are regularly reminded with the following or similar techniques and graphics, they can soon become proficient in applying them in every situation without a thought:

1. Assess the load: Before attempting any lift, make sure the load is within your capacity to lift safely. When in doubt, don't lift. Instead, ask for help.
2. Stand close to the load with back straight, chin parallel to the floor, and **steel to shoes** turned slightly out.
3. Use your hips and knees to squat, lowering your body-frame to reach the load.
4. Maintaining chin up and back straight, feel the strength in your legs raise your body-frame and the load to standing height.
5. When changing direction, passing off or pivoting with a load, start the redirection with your feet first.
6. Never twist or bend at the waist while lifting or carrying a load at any elevation!

## A Clear Illustration of a Safely Executed Lift:



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## UTP Productions Accident Checklist



- Provide first aid** if a trained person is available.
- If the injury is life threatening, then please call 911. **Otherwise, call UTP's office during business hours (801) 328-1298 M-F. Or call our dedicated injury hotline at (801) 209-9193 after hours and on weekends. You will be guided through the process.** If there is no answer, please leave a detailed message of the injury. Please provide contact information including a phone number so we can return your call as soon as possible.
- The employee, supervisor and witnesses must fill out the necessary reports.** This can be accomplished at [utpgroup.com](http://utpgroup.com) for your easiest solution. The forms may also be printed and either emailed or faxed to us. This includes incidents that may not require immediate medical attention. **All reports must be received within 24 hours of the incident.**
- Investigate the accident scene – provide detailed description of accident and equipment involved. Pictures may also be taken with a cell phone and sent via text message to (801)209-9193.**
- Any accidents/incidents that involve death, amputation, loss of an eye or inpatient hospitalization require that the scene be preserved per OSHA requirements!**
- Other important contact information:  
UTP Productions Phone: 801 328-1298  
Fax: 801-328-1307  
email: [workcomp@utpgroup.com](mailto:workcomp@utpgroup.com)

# SAFETY SPOT

## A Tale of Our Accidents

The following is a list of incidents and accidents that have occurred in the last quarter.

**Alabama: #1-** Employee was assembling a 16 ft tall curtain and drape structure when one of the metal rods fell off and stuck the employee on the top of their head. This caused bruising but no concussion.

**Arizona: #1-** Employee was loading a truck and while pushing a box into place a chair that was riding on top of the boxes fell and hit the employee on the top of their head and left temple. The employee had a hard hat on which protected him from the first hit, but the second blow caused the employee to suffer concussion-like symptoms.

**Arizona: #2-** While performing a team lift while loading a truck the employee's right hand was pinched between two boxes. While removing their hand the employee also cut their finger on the boxes metal bands. This led to a fractured finger and laceration that required stitches.

**Arizona: #3-** While carrying a basket of wardrobe the employee walked around a gondola and tripped over a second basket that they could not see on the ground. Employee was unable to brace for the fall and fractured their left arm upon impact.

**California: #1-** While trying to lift railing up onto a platform above them that was taller than the employee the employee strained their right shoulder.

**California: #2-** Employee suffered rope burns to both their hands when they had to let the rope run on a load.

**Florida: #1-** Employee was working with another to bring a cart down a loading ramp. The other employee let go of the cart and while trying to stop the cart it yanked the employee's arm. This led to a strain of the employee's right shoulder.

**Florida: #2-** While working with another employee on a wheelbar near the end of the stage the employee misjudged the distance to the edge of stage and fell off the stage landing on their back. This caused a strain to the back, hip, and right ankle.

**Florida: #3-** While working on the flyrails the employee strained their left abdomen.

**Florida: #4-** While working as a team to load a truss over a load bar the employees in the back pushed the truss and smashed the employee's hand between the truss and back of the trailer. This caused a fracture to the left hand and then also the employee strained their back as well while trying to free their hand.

**Georgia: #1-** Employee's hand was pinched between a stage piece and batten causing their fingers to get smashed. This led to lacerations on the pinky and ring fingers on their left hand.

# SAFETY SPOT

## A Tale of Our Accidents- Continued

**Georgia: #2-** While running motor cabling along the top of a lighting truss the employee went to plug in the motor and the cable and motor arced shocking the employee and causing 1<sup>st</sup> and 2<sup>nd</sup> degree burns to the employee's hands.

**Nevada: #1-** While drilling holes in steel plates to secure a set piece the drill snapped back and smashed the employee's hand leading to a fracture on a finger on their right hand.

**Nevada: #2-** While bringing in a wardrobe gondola to store it another employee started pushing the gondola from the back and in doing so pinched the employee's hand between the gondola and the door frame. This led to bruising but no fracture of the employee's right hand.

**Nevada: #3-** While working as a team to assemble a deck structure another employee kicked the deck piece the employee was working with and pinched their right hand between two deck pieces. The led to bruising but no fracture.

**Nevada: #4-** The employee was rotating the wheelset on the staging to lock into place when the wheelset bar spun backwards and struck the employee in the face. This led to a cut on the face as well as the employee suffering concussion-like symptoms.

**North Carolina: #1-** While working with a coworker to take a case down the loading ramp. The case was heavier than they thought and rolled faster down the ramp than expected. The employee was unable to get out of its way in time and their left ankle was pinched between the case and the stage. This fractured the employee's left ankle.

**Oregon: #1-** Employee was asked by show personnel to lift a heavy truss. While doing so the employee felt a strain to their lower back.

**Oregon: #2-** While moving a set cart the set cart was rolled onto the employee's foot leading to bruising and a strain to their right foot.

**Texas: #1-** Spotter told employee to pull a load up while the rest of the crew was still pulling down. This caused slack in the rope and the employee suffered rope burns to both their hands.

**Texas: #1-** While lifting decking off a load cart the employee strained their left ankle.

**Utah: #1-** While working near a forklift the employee was backed into by a forklift driver which ran over their foot causing bruising to their right foot.

We would like to reach as many relevant people as possible with this safety tool. Please send email addresses of any stewards, safety committee members or other stagehands who may be interested in receiving the Safety Spot to: [Connor@UTPGroup.com](mailto:Connor@UTPGroup.com)