



BACK INJURY PREVENTION PROGRAM

Purpose, Objective, Scope

- **Purpose:** The program encompasses those job duties that include or require repetitive lifting or body movements as part of work activities that may affect their back. This program will also include employees who do not have job duties of a repetitive nature. The program is intended as an educational tool to control health costs.
- **Objective:** To reduce back and other sprain/strain injuries in the workplace. Identify the proper lifting techniques to avoid back injuries and develop good habits in doing proper movements.
- **Scope**
 - The scope of this program is to educate employees to understand the importance of proper lifting and proper body mechanics. Responsibilities are outlined that employees must adhere to.
 - This program will provide instructions on proper body mechanics designed to reduce risk factors that contribute to back injuries.
 - All work-related activities are included to include handling of wood and metal in all production areas, maintenance and shipping and receiving

Types of injuries and Facts About Them

The following chart lists types and information on back injuries and some facts about them.

Type of Injury	Facts About
Strains and Sprains	Can result from injury to muscles and ligaments that support the back. A torn ligament will result in severe back pain.
Ruptured or Slipped Disk	Is not uncommon and occurs when the disk (vertebral cushion) presses on a nerve.
Chronic Stress	Can result in muscle spasms and aggravate persistent and painful backache.
Other	Such as pain “referred to the back” from other organs, such as the kidneys and prostate, can result in back pain

Lifting and Body Mechanics Program Activities

- Test the load. Prior to lifting or moving an object, test the weight of the load to make sure it can be moved safely. Use an assist device if necessary. When the weight exceeds 50-60 lbs. for a male and 35 lbs. for a female, consider getting help to move the item if mechanical aids are not available.
- Plan the move. Check the path of travel or destination of the load to make sure it is clear. Clear the path before picking up the load.

- Use a wide, balanced stance with one foot ahead of the other. A solid base of support reduces the likelihood of slipping and jerking movements.
- Keep the lower back in its normal arched position while lifting. Bend at the knees or hips. With the back arched, the forces are more evenly distributed on the support structures.
- Bring the load as close to the body as possible. Prevents your back from acting as the fulcrum and reduces the stress. The extended back has a 10:1 ratio; meaning 10 lbs from the body puts 100 lbs in the back, not including the weight of the trunk.
- Keep the head and shoulders up as the lifting motion begins. This helps to maintain the arch in the lower back and neck.
- Tighten the stomach muscles as the lift begins. The abdominal cavity becomes a weight bearing structure, reducing spine loading.
- Lift with the legs and stand up in a smooth, even motion using the strength of the legs to straighten the knees and hips as the lift is completed decreases
- Move the feet (pivot) if a direction change is necessary. This movement eliminates the need to twist at the waist, significantly reducing the stress on the supporting structure of the back.
- Communicate if two or more individuals are involved in the movement. Two-way communications reduce the likelihood of an error, which could result in sudden or jerking movements.

Alternatives to Lifting, Carrying, or Otherwise Moving Items

- Hoist to lift and maneuver molds into machines
- Forklifts to move material
- Dollies
- Power or non-power lift jacks
- Carts to transport material
- Other devices available

Risk Minimization Techniques

- Adjusting the work areas to fit worker's ergonomic needs.
- Varying the work tasks throughout the workday.
- Working within the limits of physical capabilities (will require strength and flexibility medical evaluation).
- Rotate jobs whenever possible throughout the workday.
- Getting assistance when an item is too heavy or awkward for one person to carry or move.
- Remove trip and slip hazards. Aisles and walkways are clear of material and debris and clean walk surface when carrying or moving any item.
- Utilize lifting aids whenever practical

Back Safety Actions

- Involve employees in work planning to identify work process problems that affect the back and neck.
- Work with management and employees to prevent back injuries by finding solutions for work process problems.
- Posture – Standing, sitting, or reclining, that affect posture because of the amount of strain placed on the back. Poor posture increases strain on the back muscles.

- Poor Physical Condition – Poor physical condition can lead to back pain. (Overweight people, and especially with a potbelly, puts extra strain on your spine results. An estimate is every extra pound up front puts 10 pounds of strain on your back). The company will consider employee assistance programs or other means to increase physical conditioning.
- Stress – Work stress is a factor that leads to back pain (stress created from work or home can cause muscle spasms that affect the spinal nerve network). The company will consider approaches that will reduce the degree of stresses experienced by employees.
- Repetitive Trauma – Repetitive, irritating movements accumulate and weaken affected muscles or ligaments that eventually create a more serious injury. The weight of objects, repetitive motions, and positions are key areas of review. The company will review job enlargement, job rotation, process changes or outsource jobs conducive to high levels of repetitive trauma to reduce the risk of back injuries.
- Support and encourage stretching throughout the day. Stretching is a main factor in long term care in preventing back injury.
- Designate an area for stretching prior to starting work
- Stretching at the workstations – micro breaks of 5 to 10 second stretches
- Hand out materials for different stretches during refresher training.
- Employees with either work or home related back injuries or strains need to inform their Foreman immediately. Taking prompt action in many cases minimizes additional potential for injury by working with the confines of restrictions.
- Employees with injuries who are returning to work will be given alternative tasks consistent with their health care provider's recommendation.

Responsibilities

- **Safety Manager**
 - Approves the Company's Back Injury Program.
 - Requires annual employee Back Injury Prevention training.
 - Ensures budgetary allotments to support the Back Injury Prevention Program.
 - Delegates the implementation of the program to the Manager.
 - Upon need, establishes specific responsibilities and performance levels for the Manager.
- **Business Coordinator**
 - Custodian of written program and training records.
 - Provides educational material to employees on back injury prevention upon request.
- **Manager**
 - Understands the purpose, objectives and process of the Company's Back Injury Prevention Program.
 - Overall implements the Back Injury Prevention program.
 - Reviews work areas for known cumulative trauma position potentials and alter to lessen risk.
 - Installs and adjusts equipment in work areas to reduce back injury potentials and support proper employee ergonomic behavior.
 - Participates in development, maintenance and job procedures relating to back injury prevention.
 - Enforces proper lifting and workstation ergonomic setup procedures among employees.

- Orientates new employees to back injury potentials for avoidance within the work area.
- Provides feedback to the Safety Manager for process changes to minimize back injuries.
- Utilizes carts, elevated surfaces, hoist, work area setup etc. to minimize lifting and bending.
- Corrects unsafe acts and conditions in a constructive manner.
- Attends safety training sessions on this topic.
- Ensures employees attend the Back Injury Prevention training.
- Assists employees in understanding the benefits of this program.
- Knowledgeable of basic back injury prevention activities.
- Reviews serious back injury accidents.
- Conducts periodic visual compliance audit for proper lifting and workstation setup.
- Submits a request for equipment designed to minimize or prevent back injuries.
- **Employee**
 - Complies with periodic visual compliance audit for proper lifting and workstation setup.
 - Suggests changes in work areas to support proper employee ergonomic behavior.
 - Keeps abreast of regulatory changes..
 - Maintains good work practice.