	<b>MANUAL LIFTING</b>	Document No.:	HSE-OP-043
		Department:	Operations
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## Purpose

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The purpose of this policy is to reduce unnecessary manual lifting stress. It is intended to provide Trinity employees with the proper guidance and procedures to safely perform manual lifting and material handling.

## Scope

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This document applies to all manual material handling performed at all Trinity worksites and other client locations.

## Responsibilities

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The Training & Compliance Manager is responsible for the administration, interpretation, and maintenance of this document to keep it current with business conditions. Supervisors must periodically evaluate work areas and employees' work techniques to assess the potential for and prevention of injuries. New operations will be evaluated to engineer out hazards before work processes are implemented.

## Definitions

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**Ergonomics** – The study of the interaction(s) between employees, job demands, and the work environment. Its overall goal is to minimize unnecessary stress in the workplace which can contribute to the development of Musculoskeletal Disorders.

**Musculoskeletal Disorders (MSD)** – A group of musculoskeletal disorders resulting from repeated micro-trauma to the body. They are also referred to as "repetitive strain injuries" or "repetitive motion injuries." MSD is not a diagnosis, but rather a category of various injuries/illnesses.


**Risk Factor** – Aspect of an activity or job task leading to body stress and contributing to ergonomic-related injuries and illnesses. They are also referred to as "stressors," "exposures," or "hazards."

## Lifting & Handling Policy

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Trinity supports and is openly committed to safe manual material handling and lifting policies and procedures. As a leader of programs promoting ergonomics in manual material handling, the Trinity HSE and management will:

- Clearly communicate management's commitment to the program
- Establish ergonomic program goals and objectives

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- Provide the authority and resources (including, but not limited to financial) necessary to carry out all assigned program activities
- Designate staff responsibilities and create an organization of individuals to attain these goals and objectives
- Establish a system of accountability to ensure all program-related duties are properly carried out according to established timelines
- Investigate and document musculoskeletal injuries caused by improper manual handling and/or lifting
- Incorporate investigation findings into work procedures to prevent future injuries
- Facilitate appropriate return to work programs for employees returning to work with cumulative trauma disorders

Employees have the responsibility to:

- Provide input to current and/or alternate work methods during ergonomic job reviews
- Provide feedback to the engineering staff or ergonomic task force prior to implementation of any ergonomic improvements
- Identify any areas of concern in their job/work area which could contribute to cumulative trauma disorders
- Provide suggestions for controlling ergonomic risk factors to their supervisor or Trinity HSE
- Report any early symptoms of cumulative trauma disorders
- Perform manual material handling using fundamental ergonomic concepts, in compliance with PSL safety rules and policies

## **Training**

Manual lifting training will be provided at the time of initial assignment. Training will include general principles of ergonomics, recognition of hazards and injuries, procedures for reporting hazardous conditions and methods and procedures for early reporting of injuries. Injuries must be recorded and reported (29 CFR 1910.1904). Additionally, job specific training will be provided on safe lifting and work practices, hazards and controls.


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## General Procedures for Lifting

Before manual lifting is performed, a hazard assessment must be completed. The assessment must consider size, bulk, and weight of the object(s); whether mechanical lifting is required; if a two-person lift is required; whether vision is obscured while carrying, as well as the walking surface and path where the object is to be carried. Where use of lifting equipment is impractical, two-person lifts must be used.

Manual lifting equipment such as dollies, hand trucks, lift-assist devices, jacks, carts and hoists are provided for employees. Use of provided equipment by employees must be enforced. The following are general procedures to follow when lifting materials:

- Evaluate the load (weight, size, shape, sharp edges, and points).
  - Determine if it is possible to see over and/or around the load.
  - In a choice between bodily injury and damage to the equipment, the body needs to be protected.
  - But remember, if the work was planned and followed the correct procedures, the choice would not have to be made.
- The maximum lifting load limit for one employee will not exceed 50 pounds.
- Mentally select the best travel path. Do not rush.
- Decide if help is needed (i.e., another person, forklift, crane, dolly, etc.) before starting to lift a load.
- Use the proper body position as determined by the size and shape of the load.
- Wear leather gloves when handling rough or jagged edged objects.
- Report any/all injuries immediately to the Supervisor.
- When lifting containers:
  - Squat, do not stoop or bend from the waist and keep back straight.
  - Place right foot parallel to one edge of the box (opposite, if left handed).
  - Place left hand on the corner of the box or as far as it is comfortable. On circular or irregularly shaped objects, place left hand at a comfortable point.
  - Place right hand along or under the edge of the container (tip the container slightly to get a grip).
  - With the back straight, lift up using the leg muscles NOT the back muscles.
  - Walk slowly. To change directions, stop, then turn feet in the desired direction. Do not turn body at the waist. Lean back slightly when traveling.
  - To place the object down without injury, stop walking. Keep back straight and move left foot back slightly. Squat down, taking the strain on the leg muscles. Let

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the front left point of the container or its front edge rest on the ground and slip right hand up from under the right side of the container and lower the container flat on the floor/ground. Stand up smoothly **KEEPING THE BACK STRAIGHT**.

- When lifting rods, poles, and piping:
  - Tie, tape or strap such material near each end of the bundle; one tie is not enough. Make sure no one/nothing is behind the bundle.
  - The maximum bundle length permitted to be carried by an individual is 8 feet.
  - At the rear of the bundle, squat down with right foot forward parallel to the bundle. Keep the back straight and slip one hand then the other under the bundle. Lift the bundle and straighten up smoothly, loading the bundle up onto a shoulder.
  - Walk slowly. Travel with the bundle pointed down so it can be controlled in the front.
  - To turn, stop and check behind for people or things may get hit with the bundle. Move left foot first into the turn. Keep back straight and do not turn the body.
  - To set the bundle down without injury, stop walking; place the front end of the bundle securely on the floor/ground. Back down the bundle, squat down and lower the bundle to the floor/ground. Keep back straight, stand up and back away from the bundle.
- Multiple Person Carry
  - Decide on a leader to give directions and follow safe lifting guidelines.