

## **ERGONOMICS: MOVING, STORAGE AND HEAVY CUSTODIAL**

### **Preventive Measures and Controls**

#### **Material Handling**

- Test the load to determine if it is light enough to lift prior to lifting.
- Plan your route before lifting and carrying the load.
- Instead of carrying one heavy load, separate it into smaller, lighter packages and make multiple trips. Use a cart or trolley or ask a co-worker for assistance.
- Place or store heavy items at mid-body height to make retrieval easier.
- Do not lift objects that are slippery, extremely hot or unevenly balanced.
- Make sure you can fit through narrow spaces and that your fingers are out of the way when you set the object down.
- Keep your arms and the load as close to your body as possible.
- Bend with your knees and let your legs and hips do most of the work.
- Do not arch your back.
- Use small steps when walking with a heavy load.
- Do not use fast or jerky movements when lifting, especially when lifting heavy objects.
- Regardless of the weight of an object, use proper lifting techniques to avoid injury. Injuries may result even when lifting light objects if done incorrectly or frequently over long durations.

#### **Pushing and Pulling**

- Always use two hands when pushing or pulling. Do not pull with one arm extended behind your body.
- Ensure that good visibility is possible without awkward motions such as twisting or stretching. If your vision is blocked when pushing a cart from the back, move to the front corner of the cart to push.
- Keep your upper arms against your rib cage with your elbows in. Keep your hands at or slightly above waist level. Keep your feet shoulder width apart.
- Bend your knees slightly and move the load by shifting your weight. For example, with one leg in front of the other, bend your knees and move the load by shifting your weight from your back leg to your front leg.
- It is better to push than pull a load. Pushing generally takes less effort than pulling because your body weight is used to assist the exertion. Pulling a load often causes carts to run into the shins or ankles.

#### **Moving**

- Know your route prior to beginning the lift and move of the load.
- Ensure that the path to your end location is free of obstacles and debris.
- Set barriers to prevent people from coming close to or beneath supported or moving loads.
- Move objects when traffic in these areas are at a minimum.
- Take breaks when walking long distances with heavy loads to allow your body time to rest.
- Avoid sudden, quick movements.

**Placing or Depositing the Load**

- Keep your body in a neutral posture to help avoid injury while placing or depositing a load.
- Keep a wide stance with one foot in front of one another.
- Keep the load close to your body.
- Bend at your knees when starting to place the load.
- Keep the object tilted when close to the ground to allow for easy finger removal from underneath the box or load.
- Avoid sudden movement and jerking motions at all times.
- Whenever possible leave enough space to allow the equipment to slide in easily. Trying to fit a piece of equipment into a tight space can lead to hand injuries.

**Tools & Equipment**

There are many different mechanical aids that can be used to assist with heavy material moving. Wheeled equipment aids will help minimize the force needed to move a heavy object. The amount of force required to move loads with wheeled equipment depends on a number of factors listed below:

- The weight and shape of the load.
- The type and condition of floor surfaces. A carpeted floor will require more force than a smooth surfaced hard floor like cement.
- The type, size and wheel construction will make a difference in how much force is required to push or pull the cart.
- Straps can be used to keep the load from shifting from one side to the other. Properly installed straps can prevent injury and property damage.
- Know the limitations of this equipment and call Environmental Health and Safety for assistance with purchasing new equipment or tools.