

# Body Mechanics



Keep the following information in mind to keep your back safe while you bend and lift! Environmental Services should be called to do any lifting of heavy items.

## LIFTING

- Most back injuries or strains result from improper bending or lifting. According to the principles of biomechanics, the most lifting situation occurs when the body is extended over the load. Also, twisting in the position invites injury. Keep your back upright to shift weight on the powerful leg muscles and reduce the lever effect.
- Face the object.
- Get firm footing. Keep your feet shoulder-width apart for a stable base; point toes out.
- Move your whole body as one unit.
- Bend at your hips and knees, not at your waist. With your back straight, get down on one knee. Keep the principles of leverage in mind at all times. Don't do more than you have to.
- If you can, tilt the object so one side lifts off the ground.
- Tighten your stomach and leg muscles. Use your legs, arms, and buttocks to lift, not your back. Avoid twisting. Abdominal muscles support your spine when you lift, offsetting the force of the load. Train muscle groups to work together.
- Lift the object to your knee.
- Get a firm grasp on the object.
- Lift with your arms and legs, not your back. Move quickly to help make this easier.
- Keep load close. Don't hold it away from your body.
- Keep your back upright and avoid twisting.

## TO CARRY AN OBJECT

- Hold it close to your body.
- Bend your knees slightly as you walk. The heavier the object, the more you should bend your knees.
- Get help with heavy or unbalanced objects.



## **BENDING OVER**

- Keep your feet shoulder-width apart.
- Move your whole body as one unit.
- Bend at your hips and knees, not at your waist.
- Flatten your stomach and tighten your leg muscles.
- To keep your spine straight, let your buttocks move out behind you. Don't try to tuck them under.
- If you need to, place one hand on a sturdy object for support.

## **BENDING TO THE FLOOR**

- Lower yourself to one knee. If you can, rest one hand on a sturdy object to help lower yourself.
- Rest one arm on your raised knee.
- Don't bend at the waist.
- Do not hunch your back or neck to reach to the floor. Instead, bend at your hips and knees to get closer.