What are Body Mechanics? Body mechanics is a term used to describe the way we move during daily activities. Proper body mechanics can help you avoid injury and muscle fatigue, and can help you protect your spine after spine surgery and for the rest of your life. It is essential that you use proper body mechanics when doing things such as lifting, bending, squatting/stooping, pushing/pulling, twisting and getting in and out of bed. This handout will show you how to properly do these things and live a life with a healthy spine.

**BENDING:**

1. Squat with feet apart or kneel down on one knee.
2. Bend knees and hips – not your back.
3. When leaning forward, move your whole body – not just your arms.

**LIFTING**

1. Always check the load before you try to lift it.
2. Make sure your feet are wide enough apart to keep a stable base – shoulder-width works for most.
3. Position your body as close to the load as possible.
4. Bend at your knees and hips – not at your back.
5. Do not plant your feet and twist – move your feet as you turn.
7. Breathe out when you lift – don’t hold your breath.
8. Lift with your legs – not your back.
9. Use smooth, controlled movements to lift – no jerking.
10. If you feel pain while lifting, the load is too heavy or you need to readjust.

**LIFTING FROM THE FLOOR:**

![Correct and Incorrect Lifting Poses]

**OTHER WAYS TO LIFT:**

**Lifting/reaching overhead.** Keep abdominals tight and shift weight onto your front foot.

![Correct and Incorrect Lifting Poses]

**Golfer’s Lift:** Used for small objects on the ground. Keep back straight and raise one leg straight out behind you as you lean down to pick up an object.

![Golfer’s Lift Diagram]

**Straight Leg Lift:** Use this lift when obstacles prevent you from bending your knees. Try to avoid this as much as possible. Push buttocks out as much as possible to avoid bending at the waist and bend your knees slightly. You may also lean against the obstacle for support.

![Straight Leg Lift Diagram]
Reaching

1. Always check the load you are reaching for before moving it - test one corner.

2. Reach only as high as you comfortably can. Avoid stretching too far.

3. Use a step stool when appropriate.

4. Let your arms and legs carry the weight – not your back.

5. Keep the load close to you.

6. Put one leg in front of the other for support (see above reaching overhead).

Pushing / Pulling

1. Whenever possible, push rather than pull. You can push twice as much as you can pull without injury.

2. Stay close to the load. Do not lean forward.

3. Use both arms. This will keep you squared off to the object and keep your spine straight.

4. Tighten your stomach muscles when pushing. Do not hold your breath. Breathe out.

5. Keep hips facing in the direction of the push.

Sitting

Sitting for long periods of time can cause your spine to feel uncomfortable. Use these suggestions to help:

1. Use a cushion or rolled towel to improve support for your lower back.

2. Feet should rest comfortably on the floor or footrest – no dangling. The chair should not dig into the back of your knees.

3. Ensure materials are within arm’s reach to avoid awkward movements or excessive reaching.

4. Get as close to your work as possible.

5. If you can, perform some of your work while standing or alternate between sitting and standing. Standing desks are very helpful for this.

6. Change positions frequently during the day.

Standing

If you must stand for long periods of time, make sure you maintain good posture.

1. Consider raising or lowering the workstation so you are not bending or leaning back too much.

2. Stand on anti-fatigue mats or wear soft soled shoes or inserts.

3. Consider a foot support to relieve the demand on your legs or place your foot on an elevated surface from time to time.

4. Do not lock your knees. Keep them soft with a slight bend. This is good for circulation and to help the muscles in your back absorb shock.

5. Stand with your legs shoulder-width apart, with one foot slightly ahead of the other.


7. Take a break periodically and stretch.