Back Injury Prevention

Five Golden Rules of Lifting a Load

**Stretch**
- Test the load — this gives you the opportunity to test the weight of the object before the move begins.
- Plan the move — make sure you have a clear pathway before starting the task.
- Think of trash cans, chairs and other tripping hazards.
- Use a balanced stance.

**Bend Your Knees**
- A solid base of support reduces the likelihood of slipping and jerking movements.
- Your positioning creates stability.
- Keep the lower back in its natural arched position during the lift.

**Arch Your Back**
- Keeping your head and shoulders up is a good place to start.
- Bring the head and shoulders up as the lifting begins.
- Neutralize the lower back position.

**Hug Your Work**
- This positioning of the load reduces the amount of work required by your lower back.
- Tighten your stomach muscles as the lift begins.
- Lift the legs and stand in a smooth, even motion. This requires bending at the knees and hips before the lift begins.

**Never Twist and Lift**
- Move the feet (pivot) when changing directions.
- Position the feet in the direction of the transfer and pivot your body.

**Stretching Tips**
Professional athletes stretch before beginning an event — why?
- Stretching gets the body ready for movement.
- Daily activities (walking, bending, etc.) cause muscles to contract and shorten. If the muscles aren’t stretched and lengthened, they remain short, inflexible and more prone to injury.
- When muscles are flexible you are better able to stretch them to their limits without injury.
- Don’t bounce or treat your muscles like a rubber band — stretching is a slow, steady process.
- Stretching can be done anytime. It’s best to stretch in the morning and before any activity, which requires muscle use.
- A daily stretching routine provides the greatest benefit — your flexibility will increase steadily with a regular program.
- Breathe slowly and rhythmically; exhale when bending to help relax the body.
- Stretch to a point of tension, which subsides after holding it. If the tension increases, you are overdoing it.
- Don’t compare yourself to others. Some people are more flexible than others. Observe your own improvements.
- Hold the stretch in a comfortable position; do not push to the point of pain.

**When performing any exercise follow these basic steps:**
- Continue to breathe normally.
- Stretch only to a comfortable point.
- Stop if pain occurs.
Useful Back Exercises

Shoulder Circles
- Sit or stand and circle your shoulders backward in a wide arc.
- This exercise releases neck, shoulder and upper back tension.
- Repeat five to 10 times.

Back Bend
- Sit or stand and place your palms on your lower back.
- Lean the upper body back without overarching your neck; this stretch should be felt from the shoulders to the hips.
- Hold this position for five seconds and repeat three times.

Deep Squat
- Stand with your knees bent, feet shoulder-width apart, and heels flat on the floor.
- Squat as low as your muscles permit; feel the hip stretch.
- Hold this position for five seconds and repeat three times.

Neck Retraction
- Sit or stand and simply slide your chin straight back, keeping your head and ears level.
- This exercise realigns your cervical curve

Sidebends
- Sit or stand with your hands clasped overhead.
- Stretch as far as you comfortably can to one side; this stretch should be felt from the shoulders to the waist.
- Hold this position for five seconds and repeat.

Elbow Pull
- Raise your right elbow chest high and with your left hand, pull your elbow across your chest.
- This exercise releases tension in your middle back.
- Also, try pressing both elbows backward, hold and release.

Lifting Posture
This diagram demonstrates the stress (torque) at the base of the spine when improperly carrying a load away from the body. One of the benefits of carrying a load close to the body is reducing the torque, thereby reducing exposure to back sprain and strain.