Back Safety

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Back Anatomy

The bones provide the structural support for your back.

The joints control the amount and direction of movement.

The discs separate vertebrae and are made of tough elastic material that allow the vertebrae to bend and twist naturally and act as shock absorbers.

The muscles contract to cause the body to move.

The ligaments are tough, non-elastic bands that hold the bones together.

The nerves provide the energy to make the muscles work.
80% of the population can expect to have back pain at some time in their lives.

About 8 million Americans suffer new back injuries every year.

Twice as many back injuries occur at home as in the workplace.

About 400,000 people suffer disabling back injuries each year.

Sooner or later 8 out of 10 adults at some point in their lives will experience back pain that impairs activity.
Back Injury Cycle

Injuries will continue in this cycle if not addressed

Back
Problem

Weakness

Stiffness

Stop Moving

Hurts to Move

Source: The Saunders Group
How do I Take Care of My Back?

• Body Mechanics
• Proper Lifting Techniques
• Exercise
• Stretching
• Correct Posture
Body Mechanics
- General Rules

Push vs. Pull
Keep Work Within “Strike Zone”
Keep Load Close To Body
Use Abdominal Bracing
Pivot with Feet - Avoid Twisting
Team Work vs. Mule Work

“It’s not how much you lift or move, but the way you do it”!
Team Lift Do's

**Plan the lift.** One person should take responsibility for giving the orders to lift, turn, and set down. But everybody has to understand what needs to be done before getting started so that the lift goes smoothly.

**Lift and lower in the same manner.** Each worker should follow the same safe lifting technique:

- Squat down close to the load,
- Get a firm grip,
- Keep his or her back straight, and
- Lift slowly, powering the lift with leg muscles not back muscles.

**Move slowly and evenly.** The load should be carried without sudden starts or stops. And all workers should watch where they’re going.

**Keep the load level and the weight evenly distributed.** Workers should be especially careful when going down inclines.

**Carry long loads on the same shoulder.** Each team member should carry a long load, like pipes or boards, on the same shoulder. If the object is rigid, they should walk in step. But if the load is flexible, walking out of step is the best way, since this will keep flexible objects from bouncing.

**Avoid walking backwards.** If it’s absolutely necessary, make sure the path is clear, and have an extra team member to guide the move.
Team Lift Don'ts

- Twist their bodies when lifting or carrying,
- Lift from one knee,
- Change their grip while holding the load, or
- Step over objects when moving the load.
Proper Lifting Techniques

https://www.youtube.com/watch?v=LaFoZR3gd44
Exercise

• Yoga
• Cardio
• Strength training
• Walking
• USU Wellness Program
Standing Posture

Why Your Mom Was Right about Standing Up Straight

Good Posture Promotes:
- A Healthy Spine
- Back Strength
- Confidence
- Deep Breathing
- Improved Energy

You may have hated being told to stand up straight all the time as a kid, but your mom did get something right. Your posture is critical to your health.

Bad Posture Promotes:
- Spine Pain
- A Hunchback
- Headaches
- Lack of Confidence
- Constricted Digestion

So pull those shoulders back, lift that chin up, adjust your hips, and sit, walk, or stand with purpose. Your back is sure to thank you.
Working Posture

**Wrong Sitting Posture**
- Neck:
- Shoulder:
- Low Back:
- Wrist:

**Correct Sitting Position**
- Monitor:
  - Adjust distance and height: top of the monitor at eye level and slightly tilted.
- Arms:
  - Relax shoulders, forearms parallel to the floor:
- Chair:
  - Should have a backrest and armrests, adjust height.
- Legs:
  - Thighs parallel to the floor:
- Feet:
  - Parallel to the floor, use a footrest if necessary.

**Correct Standing Position**
Work Area Evaluation

- Evaluate the work area and work practices
  - Posture
    - Sustained, repeated, loaded
  - Position
    - Height
    - Reach
    - Angles
  - Time
  - Force
- Still having pain or discomfort? EHS Ergonomic Assessment of Task
Questions?

My favorite childhood memory is my back not hurting.

"I admire your effort... but you should never try exercising to rap music."