

Body Mechanics

**Home Care Division of the Bureau of
Home and Community Services
Annual Required In-service**

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Faculty

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Objectives

- Recognize who is at risk for back injury
- Recognize risk factors contributing to back injury
- Recognize common mistakes
- Understand and apply the rules of good body mechanics

Definition

- Body mechanics
 - The way we use our bodies to complete various tasks during activities of daily living
 - Especially important as it relates to taking care of our backs

Who's at Risk for a Back Attack?

- Middle aged (35 – 55)
- Employed
- Men & women = risk
- Women at greater risk after menopause
- 80% will experience back pain at some point in their lifetime
- Social and physiologic factors increase risk

Risk Factors

- Excess weight
- Smoking
- Poor work postures and lifting practices
- Previous occurrences of back trouble
- Physical fitness not a predictor of risk but physically fit people do recover more quickly

Why Do I Need to Know?

- **Best defense**
 - Good understanding can reduce your risk of injury

Review of the Principles of Good Body Mechanics

- Your back is critically important to your ability to walk, sit, stand and run
 - Proper care enables you to perform you job well and live your life with a healthier back

Review of the Principles of Good Body Mechanics

- A significant # of injuries occur every day in the delivery of health care services to patients in hospitals, rehab centers, ECFs, as well as patient's homes

Best Defense

- Most of these injuries are the result of improper body mechanics and could have been prevented
- Many home situations are less than ideal but a good understanding and the application of proper body mechanics can greatly reduce your risk of injury

Recognition Is Basis of a Good Understanding

- Most back injuries are the result of the accumulative effects of our lifestyles
- Rarely the result of a single physical injury

Recognition Is Basis of a Good Understanding

- Faulty body mechanics both during work as well as daily activities outside of work are likely damaging your back even if you haven't noticed any pain
- Combination of factors usually involved

Common Causes

- Poor posture
- Faulty body mechanics
- Stressful living and working habits
- Loss of flexibility
- General decline in physical fitness

Common Causes

- Cumulative effects are the real causes of back problems
- Practicing good body mechanics is one of the most important ways to combat these common causes

Common Mistakes

- Most common mistakes made when working with patients
 - Lifting with the back bent and the legs straight
 - Using fast jerking motions
 - Bending and twisting at the same time

Common Mistakes

- Load too far away
- Poor planning
- Poor communication
- Insufficient strength

Basic Application of Rules

- Even though situations in the home may vary, it's important to remember and utilize the rules of good body mechanic PRIOR to initiating patient care activities

Basic Application of Rules

- Review of the basic rules
 - Keep stomach tight when performing a lift
 - Keep low back in the normal “S” curve
 - Keep work heights at appropriate level

Basic Rules

- Allow patient to move in direction of strongest side
- Get as close to the load as possible
- Replace twisting motions with pivoting or side stepping

Basic Rules

- Wide, solid base of support
- Keep head and shoulders upright
- Use your body weight and momentum

Mental Checklist

- Go through a mental checklist
 - Plan ahead of time
 - Necessary equipment
 - Clear path
 - Dry floor, non-slip footwear
 - Secure furniture and assistive devices
 - Determine need for help

Most Important Patient Rule

- Enlist as much of the patient's help as possible
 - Not only decreases the work you have to do, but serves as exercise and training for the patient
 - Allowing the patient to move in the direction of their strongest side will allow them to assist with the transfer to a greater degree

Most Important Patient Rule

- Make sure the patient knows what is going to happen and have them repeat it so there's no confusion

Other Considerations

- Whether sitting or standing, pace your activities and take frequent breaks
- Vary the position of your body when standing
- Think in terms of right angles (the shape of an L) when sitting at a desk

Other Considerations

- Knees should be at 90 degree angles when the soles of the feet are touching the floor
- Back and thighs should form a 90 degree angle when the body is sitting properly in a chair

Other Considerations

- Wrists should be straight and elbows at 90 degrees when the hands are on the desk or keyboard
- Use a chair with proper low-back support and keep your head back and shoulders relaxed

Drive Time

- Back care and the practice of good body mechanics includes time traveling in your car
 - Sitting is one of the back's worst enemies
 - Stress and fatigue can cause you to slump in your seat which stresses your back
 - Vibrations from your car on the road also contribute

Preventive Driving Measures

- Seat appropriate distance from steering wheel
- Lumbar support cushion
- Commuter stretches
- Get out of car and move about every 45-60 minutes

Preventive Driving Measures

- When exiting a car, turn your whole body to the side
- Place both feet on the ground and stand up carefully
- Reverse the procedure then entering a car
- Sit down first, then swing both legs in together so that you don't twist your back

I Did All That, But...

- Even when you practice good body mechanics, there will still be times when you'll have to do things that are stressful to your back

So What Can I Do???

- Stretch
 - Good way to reduce effects of bending & working in forward bent posture
 - Avoid long-term static positions
 - When these activities are a necessary, take a few minutes to stretch in the opposite direction
- Pay attention to clothing & footwear

Summary of Review

- Keeping these principles in mind will decrease your chance of injury and make your job easier and less tiring
- The principles apply at home as well as at work
 - Monitor your posture and body positioning during all activities

Summary of Review

- Need to be combined with a lifestyle that includes exercise, proper nutrition, rest and relaxation.
- Remember the best treatment for your back ...

Best Treatment for Back Pain

1. PREVENTION
2. PREVENTION
3. PREVENTION

- Preventing a back injury is much easier than repairing one!

Conclusion

- Define body mechanics
- Recognize risk factors
- Know basic steps to using good body mechanics
- Understand importance of healthy lifestyle habits to help prevent injury

Only You Can Prevent ...

- It's up to you to practice the basic rules of good body mechanics and decrease your chance for back injury

Additional Resources

- Search body mechanics
- www.spineuniverse.com
- www.nonprofitrisk.org
- www.usnews.com
- www.healthlink.mcw.edu
- www.healthscout.com

Contact Information

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