#### **BODY MECHANICS AND TRANSFERS**

- Home health staff have sustained 799,004 injuries and illnesses involving days away from work in 1 year
- > Sprains, strains, and tears made up the majority of workplace injuries among nurses and nurses aides
- 2nd most common was soreness & pain

Many of these work related-injuries are results of Common Myths and Beliefs.

Myth	Reality
"Back belts are effective in reducing risks to caregivers"	There is no evidence back belts are effective. In some cases, the use increases level of risk due to a false sense of security
"Staff in great physical condition are less likely to be injured"	These staff are exposed to risk at a greater level; co-workers are more likely to ask them for help
"Patient Handling Equipment is too expensive"	Employers should consider that long term benefits of proper equipment FAR outweigh costs related to nursing work-related injuries
"Use of mechanical lifts eliminates all the risk of manual lifting"	With any transfer, human effort is required and there is always a possibility of injury. However, lifts do eliminate extreme stress on the caregiver.

- Manually lifting patients is the most frequent reason for work related back pain in the healthcare industry.
- Average weight lifted by a nurse in an 8-hour shift is approximately 1.8 tons
- The best practice for safe patient handling is the use of proper body mechanics and ergonomics

### **Maintaining Proper Alignment**

Head	Hold straight, not bending forward	
Shoulders:	Keep shoulders straight, not slumped	
Abdomen:	Hold in mid-position with slight hollow in the low back	
Proper Standing Posture:	<ul> <li>Supports musculature of back</li> <li>Increases comfort</li> <li>Conserves body energy</li> <li>Decreases fatigue</li> <li>Enhances appearance</li> </ul>	
Knees	Do not lock straight	
Feet	Hold a few inches apart, with the weight evenly distributed over the foot and the outside edge of the sole	
Proper Sitting Posture:	Do not sit with legs extended in front of you. This places undue stress on your back and will increase fatigue.	

# **Prevent Body Discomforts and Injuries by:**

- Keeping in good shape and active.
- Try to maintain optimal weight. Extra weight equals extra burden for your back and body.
- When lifting, lift with the legs with knees slightly bent. Do not reach and lift at the same time. Do not attempt to lift a load that is too heavy for your size and build.
- If you are required to sit for long periods of time, stand and walk erect for several minutes once an hour. Consider obtaining lumbar support device.
- Do not lift any object over 10 pounds if you have a condition that prohibits this.
- Elevate bed or working surface to waist level and stand close to objects to be moved whenever possible.
- Carry objects close to body.
- When moving an object, slide, push or pull whenever possible.
- Use mechanical aids if available, i.e., Hoyer lift.

# When Lifting Remember:

- Lift weight with your legs, never your back
- Place your feet in a position to give you a wide base
- Your toes should be facing the object you intend to lift
- Your toes should be facing the object as you set it down
- > Always keep the load close to your body
- > Use the power in large leg muscles, bend knees keeping spine straight for lifting.
- Adjust bed height, if possible, to level appropriate for patient care, procedures or transfer.
- Most importantly, get help for loads that are awkward or appear too heavy

### Use pivot transfer procedure:

- Face patient and spread feet for easy shifting of balance
- Give support to heavier parts of the body
- ➤ Hold patient close to your body for stronger support
- Work smoothly, steadily and without sudden jerking

# \*\*Body mechanics alone are NOT sufficient\*\*

**Ergonomics** – the science of fitting the job to the worker and practice of designing equipment and work tasks to match the capability of the worker.

#### Ergonomic approaches are used to:

- ✓ Design tasks to fit each person
- ✓ Understand the limits of the individual
- ✓ Evaluate the work environment, taking into account that when job demands exceed the physical ability of workers, problems likely exist.

#### **Ergonomic Risk Factors Observed in Patient Care Occupations**

- 1. Forceful and Heavy Exertions
- 2. High Frequency/Repetitive Tasks
- 3. Awkward Postures
- 4. Work Duration
- 5. Uneven work floors
- 6. Unpredictable patients
- 7. Dependence level of patients

#### Economic Benefits to Proper Body Mechanics:

- Decreases occupational injuries and indirect costs including
  - Employee replacement
  - o Additional training
  - Loss of productivity and liability