## **Safe Patient Handling**

- Back Injury Statistics
- Low Back Pain
- Repetitive Motion Injury
- Person Transfer
- Transfer Guidelines
- Transfer Methods
- Falling Person

#### **Back Injuries**

- 2% of all employees have a compensable back injury each year
- 29 days lost per 100 workers per year
- 21% of all injuries and illnesses in the workplace
- 33% of workers compensation payments and medical cost each year
- Overexertion most common cause

#### Low Back Pain

- 10 17% of adults have a back pain episode each year
- 2nd most common cause for physician visits
- 5th ranking reason for hospitalization
- 3rd ranking reason for surgical procedures (250,000 lumbar spine operations per year)
- Most common cause for decrease in work capacity (25 44 years old)

#### What is Repetitive Motion Injury?

Repetitive motion injury involves muscles and tissues connecting bones (tendons and ligaments).

#### The causes of Repetitive Motion Injuries:

Posture: Awkward posture for a long period of time Force: Excessive force overloading muscles and tendons Repetition: Use of the same muscles and joints over and over again while doing a repetitive task Manual material handling: Lifting, loading and carrying Workstation design: Bending, over-reaching Equipment and tools: Vibration, grip force Environment: Heat, noise, lighting

#### **Fixed or Awkward Body Positions**

When maintained for long periods of time, fixed or awkward body positions can cause discomfort and fatigue.

#### Awkward Body Position:

- Working with the torso bent forward, backward or twisted
- Fixed position of the neck and shoulders when performing controlled arm movements
- Reaching above shoulder height

2

#### How Repetitive Motion Injury Affects the Body:

- Joint/ligament injury
- Muscle injury
- Tendon injury
- Nerve injury

#### Back Injury Work-Related Causes:

- Poor workplace design
- Poor body posture
- Lifting and handling heavy loads
- Forceful exertion, bending, twisting
- Working in a stooped position
- Prolonged sitting in a fixed position

#### Work-Related Back Pain: Develops Gradually Over Time

#### **Common Symptoms:**

- Feeling of tight band across the lower back
- Pain while working in a bent position
- Difficulty in straightening the back when standing
- Pain and stiffness when getting up in the morning or when sitting or standing for long periods

## **Person Transfer**

#### What Does Person Transfer Mean?

- Moving a person out of bed and into a chair or wheelchair and back
- Moving a person from a wheelchair to a toilet or commode and back
- Moving a person from a chair into a car and back
- Moving a person from a chair into a tub lift or shower chair and back to the chair

#### Who Determines the Method of Transfer?

- Usually the nurse or the physical therapist will determine the method of transfer. The best method possible will be selected based on the following conditions:
  - The person's physical condition
    - Paralysis of any extremity
    - Amputation of an extremity
    - Recent hip surgery
  - o Any contraindications or precautions
  - The person's strength, endurance and balance, all of which may be affected by:
    - Respiratory disease
    - Cardiac disease
    - Neurological disease
    - Weight-bearing ability
  - The person's mental condition
  - The person's physical size

#### **Basic Transfer Guidelines**

Always transfer the person as directed by the nursing staff or physical therapist. If that transfer method is not safe for the current transfer, increase the level of assistance given if able to per the company safe patient handling policy. If there is a change in condition that may require using alternate transfer techniques, make sure to let designated personnel know.

# Transfers that require assistance may be broken down into three basic types:

- Gait/walking belt transfer
- Sit to stand mechanical lift transfer
- Total body mechanical lift transfer.

For a *gait/walking belt transfer* to occur the person must be able to stand and place weight on at least one leg for the designated length of time defined in the safe patient handling policy. A *sit to stand mechanical lift transfer* is done with a mechanical lift for a person that cannot stand for the determined amount of time as stated in the safe patient handling policy. This type of transfer still allows the person to be able to assist with the transfer. A *total body mechanical lift transfer* is for people that are unable to bear weight, are severely contracted, or unable/willing to participate in the transfer.

#### For gait/walking belt transfers:

- If the transfer requires two people use two people do *not* try it alone. You run the risk of injuring yourself and the person.
- Use correct body mechanics for all transfers.
- Never permit a person to place his or her hands on your body during a transfer. Disoriented or frightened persons can result in you losing your balance. You may be injured by the person's sudden movement if his or her arms are around your neck.
- Person's bones are fragile never place your hands under a person's arms.
- Make sure the gait/walking belt is secure enough that it will not ride up during the transfer. It should be placed securely around the waist with two fingers width between the belt and the waist.
- Require person to wear sturdy, well-fitting shoes with non-slip soles. This aids in maintaining the person's balance.
- Make sure the brakes on any wheeled chair are locked.
- When transferring, stand in front of the person, not to the side. One leg should be in between the legs of the person being transferred.
- Hold the gait belt with the palms facing up.
- Tell the person "on the count of three" the transfer will be done.
- Encourage the person to rock back and forth to gain momentum to aide in the sit to stand process.
- Ask the person to keep his or her head up during the transfer.
- Perform the transfer toward the person's strongest side.
- Give the person only the amount of assistance needed. If assistance is needed, the person should be pulled into a standing position...not lifted!

## Transfer Methods

#### Bed to Gurney Transfer:

- At least 2 people must be used for transfers.
- Inform the person of what is going to be done.
- Position a friction reducing device or lateral transfer aide under the person to aid in the slide.
- Adjust the bed height to match the gurney's height (set the brakes).
- Position the person close to the edge of the bed for the transfer.
- If there are extenders on the friction reducing device to pull, use those. Otherwise, place your knee on the gurney while reaching over to complete the transfer.
- On the count of three, slide the person from one surface to the other by shifting weight from front leg to back leg, not by pulling with the arms.

#### Repositioning a Person Up in Bed

- Adjust the bed height to slightly below your waist, and lower the bedrails if it is safe for the person.
- Stand at the side of the bed, feet approximately shoulder width apart pointed in the direction of the person (knees bent).
- Inform the person of what is going to be done.
- Roll the person to one side to place the friction reducing device underneath them. Then roll to the other side to get the person squarely on the friction reducing device.
- Instruct the person how to help with the move (if they are able) by pushing against the mattress with feet and/or elbows.
- Grasping the friction reducing device with the palms facing up, count to 3 and shift weight from one leg to another to slide the person towards the head of the bed.
- Do not lift the friction reducing device. It is designed to slide on itself.

#### To transfer a person into a chair:

- Have the chair ready to receive the person. If it is a wheelchair, make sure the wheels are locked and the foot pedals are up or have been removed. It may be necessary to remove the arm from the chair if that helps to make the transfer easier.
- Have the person lay in the supine position in the center of the bed.
- Tell the person to cross arms over the abdomen or chest. If the person is able to, have the arm furthest from you cross over towards you.
- Cross the person's farthest leg over the leg closest to you.
- Face the bed, standing with your thigh nearest to the person's head, braced against the bed. Make sure you bend your knees and hips and take a broad base stance.
- Place one hand on the person's far shoulder and one on the far hip, turn the person onto the side, facing you.
- Flex the person's hips and knees.
- Using the arm that is closest to the person's legs, reach across the top leg and secure both legs with your arm.
- Place your other arm so that your forearm supports the person's shoulders; cradle the person's neck and head with your elbow.
- Shift your weight from your leg closest to the head to your leg by their trunk as you lower the person's legs over the edge of the bed, and bring his or her head and shoulders to an upright position.
- Ask for assistance from the person if they are able to help by pushing with their arms.

6

#### Transferring a person with a sit to stand lift (requires two people)

Before any mechanical transfer, check the slings and straps for frayed areas or poorly closing clasps, and report these to your supervisor immediately.

- \_\_\_\_\_ Inform the person of who you are and what you are going to do. Make sure the person has on appropriate footwear.
- \_\_\_\_\_ Place the lift in front of person and ask the person to place feet on the foot plate, or assist the person if necessary.
- \_\_\_\_\_ Place strap around lower legs.
- \_\_\_\_\_ Place sling around person, using appropriate loop.
- \_\_\_\_\_ Secure belt around person's waist.
- \_\_\_\_\_ Have the person grab onto the sit to stand lift handles to assist with the standing process.
- One caregiver stays by the person and assures the sling is secure and the standing motion is safe. The belt should be tightened once more after the person is slightly lifted out of the chair.
- \_\_\_\_\_ Second caregiver operates the controls to bring person to a standing position.
- \_\_\_\_\_ If transferring to another location (w/c, bed) caregiver by person assists in turning the lift while the caregiver by the controls pushes/pulls the lift.

#### Mechanical Total body Transfer (requires two people)

Before any mechanical transfer, check the slings and straps for frayed areas or poorly closing clasps, and report these to your supervisor immediately. Make sure to use the proper size sling for the person. The lift procedure should be explained to the person.

- \_\_\_\_\_ A caregiver on each side of the bed.
- Roll the person toward one caregiver; place the sling so that it is low down on (under) the person's back. (Caregiver may need to fold the sling lengthwise in order to bring the leg stirrup or pads out and under the thighs, and then cross the straps unless person's physical condition prohibits this.)
- \_\_\_\_\_ Roll the person toward the second caregiver across the sling so that the person is squarely in the center.
- \_\_\_\_\_ Secure wheelchair (if applicable) from movement.
- Roll the lift to the side of the person's bed. Open the base of the lift to its widest point. Place the base under the bed so that the guide handles are next to the bed and the overhead bar of the lift is directly over the person. The second caregiver grabs the bar as the lift is lowered so it does not strike the person.
- \_\_\_\_\_ Hook the loops on to the bar of the lift according to the size of the person.
- Provide support for the person's head if there isn't a head support on the sling.
- \_\_\_\_ Check all connections on the lift to be sure that they are secure and will support the person.
- Raise the person off the bed. One caregiver operates the controls and uses one hand to assist with guiding the lift. The other caregiver uses both hands to control the lift.
- \_\_\_\_\_ When the sling is high enough to move the person easily and safely, the lift is then moved. The person should be brought no higher than needed.
- \_\_\_\_\_ Roll the lift over to the chair until the chair is inside the base of the lift, directly under the sling.

- \_\_\_\_\_ Slowly turn and lower the person gently into the chair.
- When the person is securely seated, releases the attachments. Remove the sling from under the person and roll the lift out of the way. To remove the sling: Lift one leg of the person at a time and slide the sling outward and remove.

#### **Falling Person**

- If a person falls, do not try to prevent the fall, rather guide him or her easily and safely to the floor. This can be done by using the wall to help guide the person down, or with your own body. The person can be pulled into your body and slid down the trunk and one leg onto the floor. Remember to keep your knees bent.
- Remain close to the person and summon help.
- After medical assessment, if the person is able to get up on their own, they may do so. If not, then either a total body lift should be used and instructions followed as noted in the total body lift section or the paramedics should be called.