

Body Mechanics and Safe Patient Handling

Body Mechanics

- means using the body in an efficient and careful way
- involves good posture, balance, and using your strongest and largest muscles for work
- good body mechanics reduce the risk of injury

Body Alignment

- the way the head, trunk, arms, and legs are aligned with one another
- good alignment lets the body move and function with strength and efficiency

Base of Support

- the area on which an object rests
- a good base of support is needed for balance
- when standing, your feet are your base
- Back injuries are a major risk

Good Body Mechanics

- Bend your knees and squat to lift a heavy object.
 - do not bend from your waist because this places strain on small back muscles
- Hold items close to your body and base of support.
 - involves upper arm and shoulder muscles
 - holding objects away from the body places strain on small muscles in lower arms

Ergonomics

- the science of designing a job to fit the worker
- involves changing the task, workstation, equipment, and tools to help reduce stress on worker's body

Work Related Disorders

- injuries and disorders of the muscles, tendons, ligaments, joints, and cartilage
- can also involve the nervous system
- These are workplace health hazards
 - s/s include: pain, limited joint movement, or soft tissue swelling
- always report an injury as soon as possible

High Risk Work Related Disorders

- transfers-to and from places
- preventing falls
- picking up person
- lifting alone
- lifting persons who are confused
- lifting persons that cannot lift their own weight
- lifting heavy persons
- weighing a person
- moving a person up in bed
- re-positioning a person in a bed or in a chair
- changing an incontinence product
- making beds
- dressing/undressing person
- feeding a person in bed
- giving a bed bath
- applying anti-embolism stockings

Risk Factors that increase risk of injury

- force-the amount of physical effort needed to perform a task. lifting or transferring heavy residents, preventing falls, and unexpected or sudden motions
- Repeating action-performing the same motion or series of motions continually or frequently; repositioning residents and transfers to and from beds, chairs, and commodes without adequate rest breaks
- Awkward postures- assuming positions that place stress on the body; reaching above shoulder height, kneeling, squatting, leaning over a bed, bending twisting the torso while lifting
- heavy lifting- manually lifting residents who cannot move themselves

Back Injuries

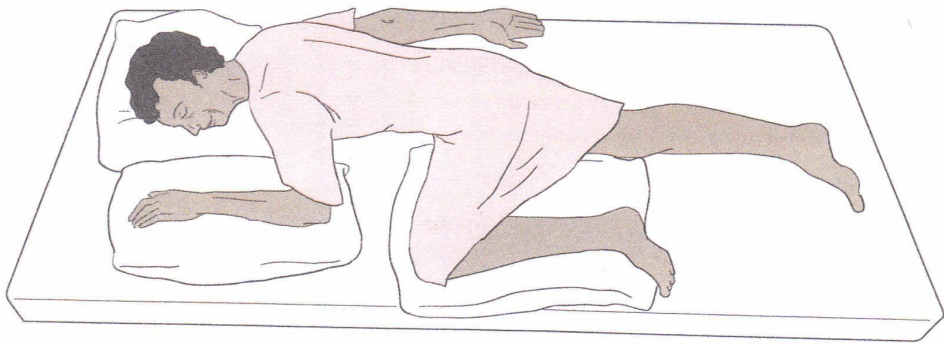
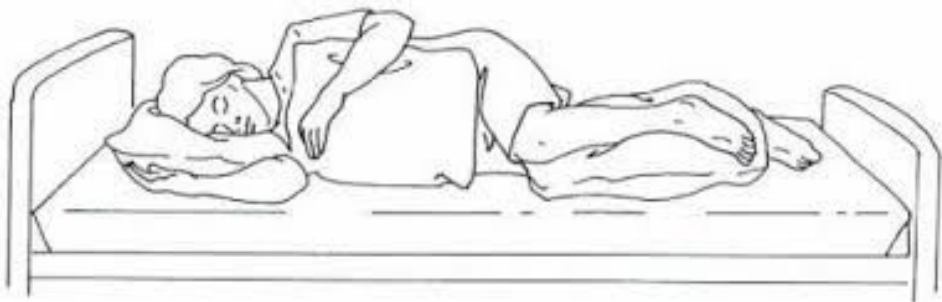
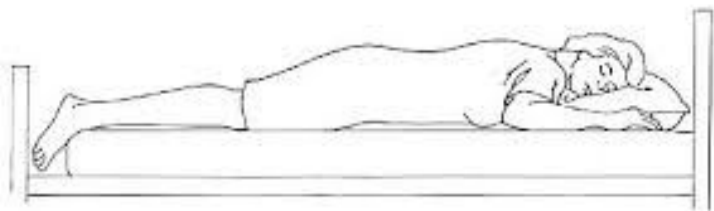
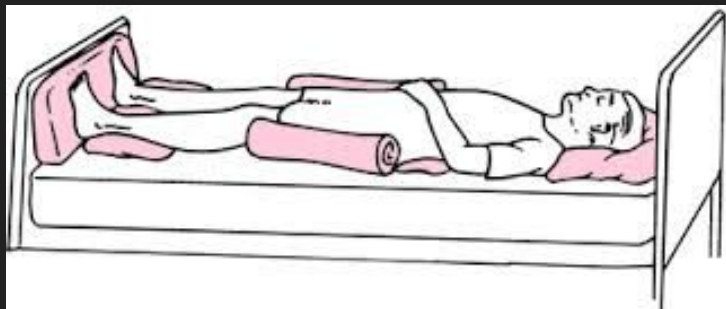
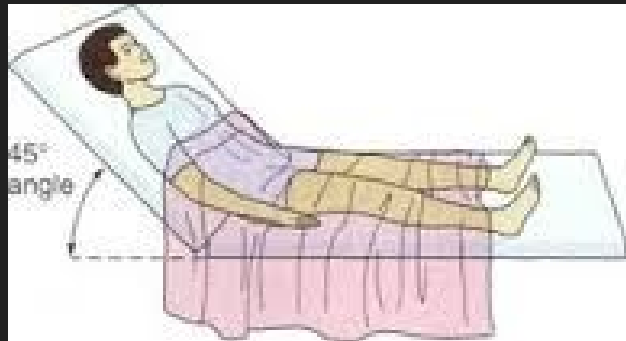
- these are major threats that can occur from repeated activities or one event
- s/s:
 - pain
 - decreased mobility
 - pain when standing or rising from a seated position
- Look at rules for Body Mechanics

Positioning the Person

- Regular position changes and good alignment promote comfort and well-being.
- breathing is easier
- circulation is promoted
- pressure ulcers and contractures are prevented

Types of Positioning

- Fowler's position= a semi-sitting position.
 - head of the bed is raised between 45-60 degrees
- Supine position= back-lying position
 - the bed is flat
- Prone position= person lies on their abdomen with the head turned to one side
- Lateral position=person lies on one side or the other
- Sim's position= a left side-lying position.
 - the upper leg (right leg) is sharply flexed so it is not on the lower leg (left leg)
 - the lower arm is behind the person
- Chair position= the persons who sit in chairs must hold their upper bodies and heads erect



To Prevent Injuries, Consider

- The person's dependence level
- the amount of assistance needed
- what procedure to use
- the equipment needed

Moving Persons in Bed

- A dependence level of Code 4: Total Dependence
 - use a mechanical lift or friction reducing device and at least 2 staff members
- A dependence level of Code 3: Extensive assistance
 - use a mechanical lift or friction-reducing device and at least 2 staff members
- Code 2: Limited Assistance
 - the person is highly involved in the moving or transfer procedure
- Code 1: Supervision
 - the staff needs to look after, encourage, or cue(remind) the person
- Code 0: Independent
 - the person can walk without help

Protecting the Person's Skin

- Older person's have fragile skin that is easily damaged
- Friction= the rubbing of one surface against another. When moved in bed, the person's skin rubs against the sheet.
- Shearing= when the skin sticks to a surface while muscles slide in the direction the body is moving. Occurs when the person slides down in bed or is moved in bed.

Reduce Friction

- Rolling the person
- Using friction-reducing devices

Logrolling is turning the person as a unit, in alignment, with one motion

the spine is kept straight

Moving the Person Up in Bed

