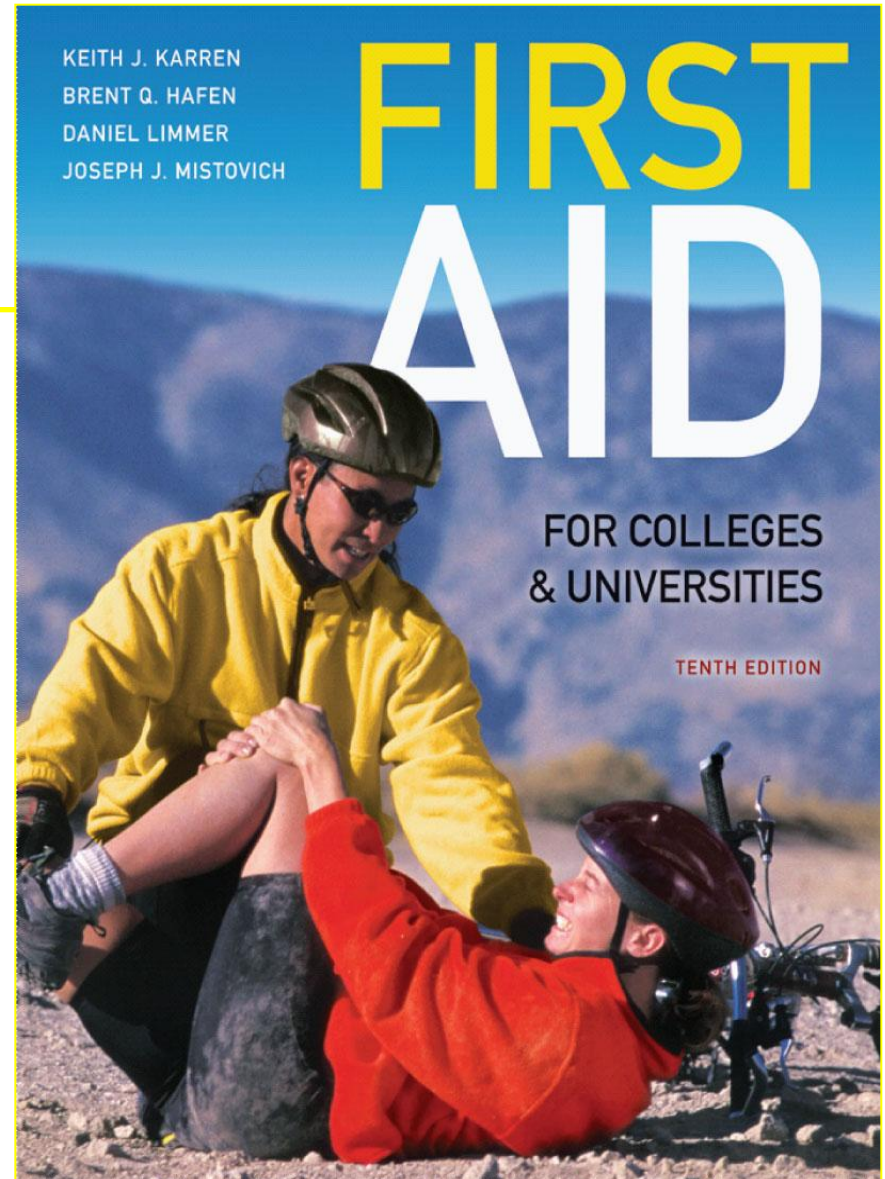


Chapter 29

Lifting and Moving Victims

Slide Presentation prepared by
Randall Benner, M.Ed., NREMT-P



Learning Objectives

- Discuss the general guidelines for moving victims.
- Identify the situations in which emergency moves must be made.
- Describe and demonstrate the following
 - Walking assist
 - Blanket drag
 - Shirt drag
 - Firefighter's carry
 - Seat carries

Learning Objectives

- Describe and demonstrate the following
 - Extremity lift
 - Chair litter carry
 - Flat lift and carry
 - How to use backboards to move a victim
 - How to use a blanket stretcher
- List objects that can be used for improvised stretchers.
- Discuss the guidelines for moving a victim on a stretcher.

COMPONENT	INFANTS	CHILDREN	ADULTS
Identify arrest	Unresponsive with apnea, or abnormal breathing	Unresponsive with apnea, or abnormal breathing	Unresponsive with apnea, or abnormal breathing
CPR sequence	Compressions then airway and breathing	Compressions then airway and breathing	Compressions then airway and breathing
Compression rate and depth	At least 100 per minute, at least 1/2 chest depth	At least 100 per minute, at least 1/2 chest depth	At least 100 per minute, at least 2 inches depth
Ventilations when rescuer is a layperson provider	No ventilations, just compressions	No ventilations, just compressions	No ventilations, just compressions
Compression to ventilation ratio for a health care provider	30:2 single rescuer, 15:2 dual rescuers	30:2 single rescuer, 15:2 dual rescuers	30:2 for one or two rescuers
Defibrillation	Attach and use as soon as possible; resume compressions immediately after each shock	Attach and use as soon as possible; resume compressions immediately after each shock	Attach and use as soon as possible; resume compressions immediately after each shock

Introduction

- Injured or ill victims often need to be moved.
- Moving victims must be done in a way that is not dangerous or harmful to the rescuer or the victim.
- Normally, moving a victim follows your assessment and basic first aid care.
- Some victims will need to be moved more urgently to prevent additional harm.

Principles for Moving Victims

- Do not move a victim until you're ready.
 - If the victim is prone, consider assessing the back prior to moving them to a supine position.
 - Do not move a victim if it may worsen their injuries.
 - Splint the victim as needed before moving.
 - The speed at which you move a victim is based on the urgency of your need to move them.

Emergency Moves

- When to make an emergency move
 - In uncontrolled traffic
 - In unstable physical surroundings
 - In exposure to hazardous materials
 - In threat of fire, or fire
 - In hostile crowds
 - To reach more critically injured victims
 - In environmental extremes

- If the victim has suffered a known traumatic event or is found unresponsive without a clear nature of illness, always take cervical spine precautions when turning the victim



FIGURE 29.1 Perform an assessment, including checking for injuries to the neck and spine.



FIGURE 29.2 Raise the victim's arm on the side closest to you (the side you will roll the victim to).



FIGURE 29.3 Place your hands at the hip and neck/shoulder area.



FIGURE 29.4 Roll the victim toward you. Keep the neck and spine in line.



FIGURE 29.5 Carefully rest the victim on his or her back; continue your assessment.

One-Rescuer Techniques

- Walking assist: Single rescuer functions as a crutch



One-Rescuer Techniques

- Blanket drag: Rescuer drags victim to safety on blanket



One-Rescuer Techniques

- Shirt drag: Rescuer uses victim's shirt as a handle to pull them



One-Rescuer Techniques

- Sheet drag: Rescuer makes a harness from a sheet passed over chest and under arms, then drags victim



One-Rescuer Techniques

- Firefighter's carry
 - Victim is lifted onto the shoulder of rescuer
 - Not as safe as most ground movement techniques
 - Do not use with suspected spinal or cervical injuries



Two- and Three-Rescuer Techniques

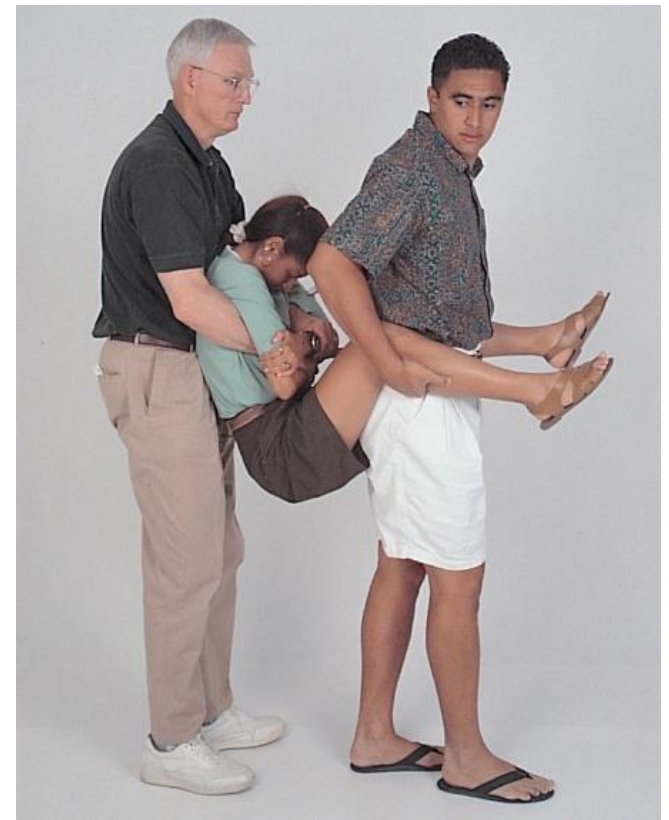
- Seat carry (two rescuers)
 - Rescuers grasp each others' shoulders/hands
 - Create a seat for the victim.
 - Raise the victim from the ground.
 - Rescuers walk in unison
 - Not good if victim has neck or back injuries

Two- and Three-Rescuer Techniques



Extremity Lift

- Two rescuers lift the victim's extremities.
- Do not use with suspected neck, back, limb injuries



Chair Litter Carry

- Sit the victim in a chair
- Rescuers carry chair by its back and legs
- Good for tight corners, avoid if victim is injured



Two- and Three-Rescuer Techniques

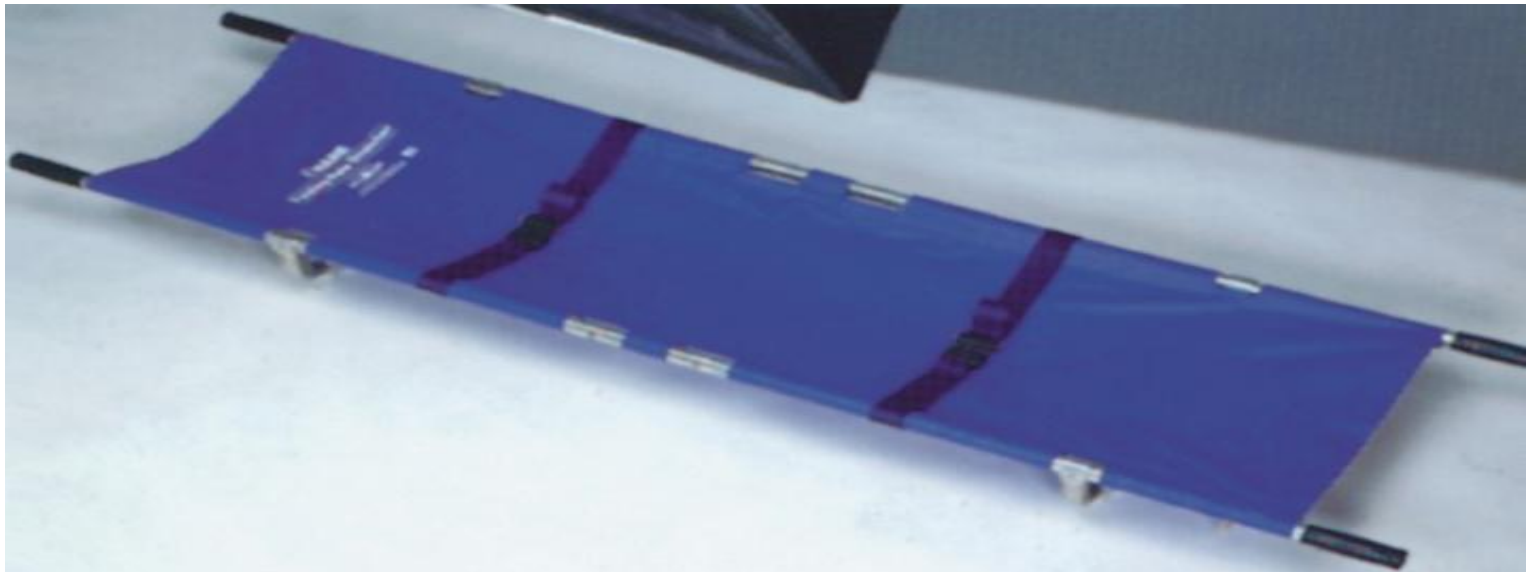
- Flat lift and carry (three rescuers)
 - Good for victims who cannot sit
 - Good for moving victim through tight spaces
 - Three rescuers position themselves alongside of the victim
 - Victim is first lifted to the rescuers, then the rescuers stand and begin movement
 - Can also be done with four First Aiders
 - Not recommended for victims with injuries

Flat Lift and Carry



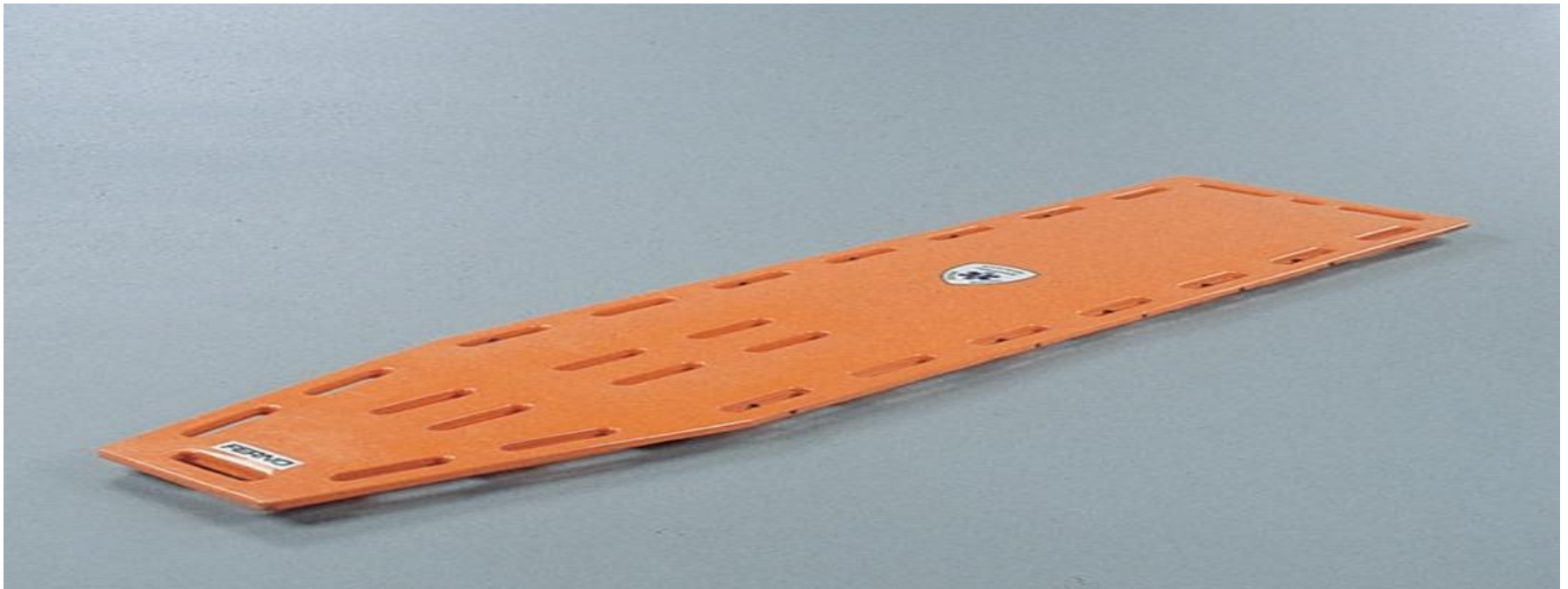
Equipment

- Canvas litter or pole stretcher
 - Has been in use for centuries
 - Lightweight, portable, most can accommodate weights up to 350 pounds
 - Not recommended for patients who need cervical or spinal protection



Equipment

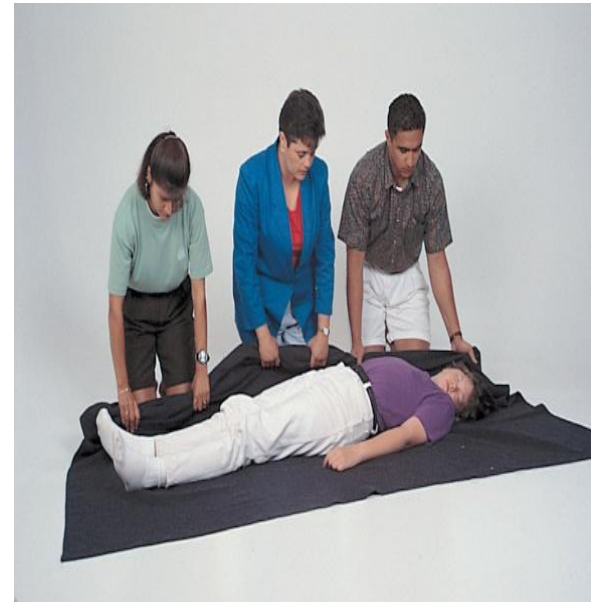
- Backboards
 - Good for providing movement with spinal immobilization and support
 - Victim should be placed on backboard without compromising cervical or spinal precautions



Equipment

- Blanket stretcher
 - Can be used in tight spaces
 - Should not be used with cervical or spinal injuries
 - Position blanket under the victim, position rescuers around around the victim, grasp blanket firmly on four sides and lift.

Blanket Stretcher



Equipment

- Improvised stretchers
 - Rescuers should be resourceful if required to construct stretchers during a disaster
 - Blanket, canvas, or sheets with two poles
 - Several coats or jackets and two poles
 - Cloth bags or sacks with holes cut for two poles

Improvised Stretcher



Equipment

- Stretcher transportation
 - Three rescuers position themselves alongside the victim
 - Lift the victim carefully while a fourth rescuer positions the stretcher below the victim
 - Then lower the victim onto the stretcher and secure them
 - Four rescuers then position themselves at each corner of the stretcher for lifting and carrying

Stretcher Transportation



Summary

- Do not move victims prior to initial assessment and management, unless the environment or safety dictates otherwise.
- The speed at which you move a victim depends on the urgency of your need for them.
- Use only those movement techniques that preserve spinal immobilization on injured victims.
- A rescuer may have to improvise carrying equipment in disaster situations.

Blanket Drag

- the best you can while preserving cervical alignment.



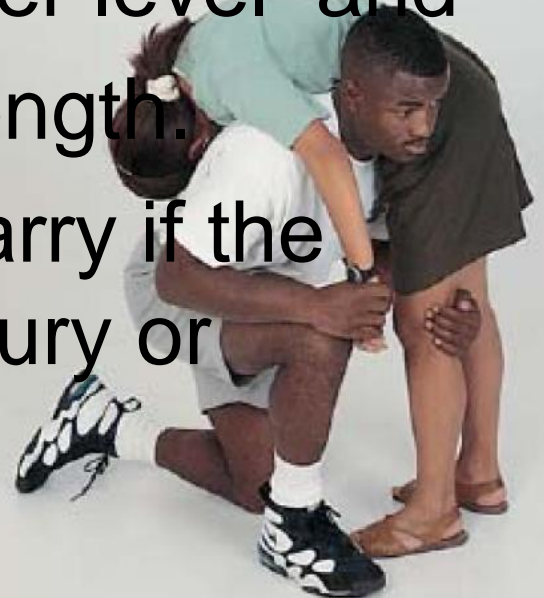
Shirt Drag

- This method could be considered when the victim has a suspected or known spinal injury.
- T-shirt stretches too much to work well.



firefighter's carry

- preferred if a single rescuer must move a victim over irregular terrain.
- places the victim's center of mass high—usually at the rescuer's shoulder level—and
- it requires a fair amount of strength.
- do not attempt a firefighter's carry if the victim has suspected spinal injury or fractures of the extremities.



- 1. Use the walking assist to help a _____ victim walk. (slightly injured/conscious/spinal-injured)



- 2. You can roll a victim onto a _____ and then drag him or her to safety. (chair/stretcher/blanket)
- 3. In the shirt drag, make sure the pulling power engages the victim's _____. (neck/shoulders/armpits)

- 4. The sheet drag involves creating a harness that is twisted under the victim's arms and behind the _____.
- (head/neck/shoulders)



- 5. Unless you are in a life-and-death situation, you should not use the firefighter's carry to move a victim with suspected _____. (spinal injury/head injury/chest injury)

seat carry

- This is not a recommended technique if there are known neck or back injuries.



Extremity Lift

- Do not use this method if the victim has back injuries or extremity injuries.



Chair Litter Carry

- This technique is great for carrying a victim around or through tight corners.
- this technique should be avoided for a victim with cervical spine injury or for victims who are unresponsive.



Flat Lift and Carry

- three rescuers lift carry the victim to a stretcher, when a cot cannot be moved close to the victim
- is an effective way to move a severely injured victim when the victim cannot sit in a chair
- permitting you to move the victim through narrow passages and down stairs.
- the victim does not have spinal injury.

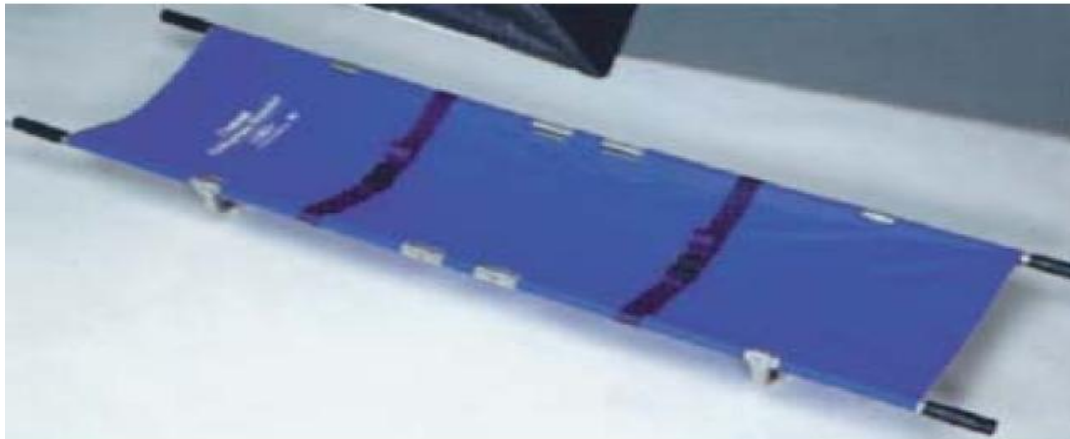


- 1. The chair litter carry should not be used on a victim who _____. (is unresponsive/has trouble breathing/has no spinal injuries)
- 2. Never use the extremity lift if the victim has _____. (head injuries/back injuries/fractures)
- 3. The firefighter's carry requires _____ First Aider(s) to perform the carry correctly. (one/two/three)

- 4. If you have at least three rescuers, use the _____ to move a severely injured victim. (flat lift and carry/extremity lift/chair carry)

Canvas Litter or Pole Stretcher

- Do not use when spinal immobilization is needed.



Backboards

- If you need to immobilize the spine,



Blanket Stretcher

- When space is limited
- you need to traverse stairs or cramped corners,
- use if the victim has no neck, back, or pelvic injuries or fractured skull.
- Use a blanket that is strong, free of holes and in good condition, and large enough to support the victim's entire body.



- 1. You should maintain manual support of the _____ until the victim is supine on a backboard. (backboard/head/head and neck)
- 2. Use a blanket as a stretcher only if you do not suspect a _____.
(pneumothorax/hemothorax/fractured skull)
- 3. Before you place a victim on a stretcher, you should test it with an uninjured person of the same _____.
(height/weight/gender)