7.15 SPLINTING

INDICATION
- Suspected or Obvious extremity fracture.
- Appropriate splinting can reduce or minimize dislocation, motion, hemorrhage, swelling, and pain.

PROCEDURE
1. Remove or cut away clothing.
2. Dress and bandage significant wounds using a sterile dressing.
3. Check CMS distal to injury before and after splinting.
4. Immobilize joints above and below injured bones.
5. For joint injuries, leave in place and immobilize the bone above and below the joint.
6. **If extremity is pulseless** it may be necessary on a mid-shaft (center 1/3) fracture to realign angulated injuries.
7. Pad splints well.
8. Elevate extremity after splinting, if possible.

GUIDELINES FOR SPECIFIC INJURIES

Realignment of Long Bone Fractures
- **If extremity is pulseless** attempt to realign (open or closed) long bones that are angulated in the middle 1/3 then splint. If resistance to movement is encountered or pain is too severe, discontinue realignment efforts and immobilize in place.
- Long-bone fractures which occur in the proximal or distal 1/3, that may or may not involve a joint, may be realigned if compromise of distal circulation or nerve function is detected and transport is prolonged.
- Realignment may sometimes be necessary to facilitate packaging for transport.
- Check and document CMS before and after splinting and/or realignment.

Dislocations/Sprains
- Splint dislocations or other joint injuries in the position found.
- Exception: Loss of a distal pulse and neurological function and definitive care is delayed.
  - In that case, attempt to straighten into anatomical position until the pulse returns, excessive pain is felt, or resistance is encountered.
  - Support with blanket, pillow, or well-padded splint.
  - Elevate the limb.
  - Pack the injured area in ice or use an ice pack.

TRACTION SPLINTING
- A lower extremity traction splint stabilizes fractures of the femur. This reduces motion, hemorrhage, swelling, and pain. Traction splints are indicated in midshaft femoral fractures without involvement of the hip joint, knee, or lower leg.
- **PROCEDURE for Applying a Traction Splint**
  1. Two EMTs are needed to apply a traction splint.
2. Remove or cut away clothing.
3. Dress and bandage significant wounds using a sterile dressing.
4. Manually immobilize the injured extremity prior to dressing/bandaging.
5. Do not apply manual traction. Check distal CMS before and after manipulation.
6. Determine SICK/NOTSICK
7. Control Bleeding
8. Size splint to uninjured leg
9. Have one EMT stabilize the leg while the other applies the traction device.
10. Apply splint
   - Groin strap
   - Ankle hitch
   - Knee strap
   - Extend
   - Thigh and calf straps
11. Reassess CMS and vital signs