

## IMMOBILIZATION OF JOINT INJURIES

- Take appropriate body substance isolation precautions.
- Remove clothing from the injured area.
- Assure the patient is stable and *not* a candidate for rapid transport.  
If the patient is critical/unstable and/or meets the significant mechanism of injury criteria, routine extremity splinting should not be done. Instead, immobilize the patient to a backboard and transport.
- Have a helper manually stabilize the injury site.  
This is necessary to keep the jagged bone ends still and minimize pain during assessment and splint application. This is done for both open and closed wounds at the injury site. This is best accomplished by holding above and below the injury site ***without*** applying traction in opposite directions.
- Assess for distal pulses, motor, and sensory function.  
Fractures or dislocations may result in damage to nerves and blood vessels. Ask the patient to wiggle all their fingers or toes (distal to the injured site) and determine if they can sense your touch. Assess the skin color and temperature distal to the injury site. Also assess for pulses distal to the injury site and compare the strength of the pulse with the corresponding pulse on the opposite side of the body.  
  
If the extremity distal to the injury site is cyanotic or lacking a palpable pulse, make one attempt to establish a distal pulse by slightly repositioning the extremity with gentle traction before splinting and recheck for a distal pulse. After attempting to reposition once and there is still no palpable pulse distal to the injury site, splint the extremity as-is and notify the hospital of the situation as soon as possible. If you encounter resistance to limb alignment, splint the limb in its deformed position. If the radius/ulna, wrist and/or hand is involved, ensure the hand is immobilized in the position of function.
- Select an appropriate immobilization device  
The device chosen must immobilize the bones above and below the injury site. The splint must be appropriately measured to assure the splint is of adequate size.
- Position the splint while maintaining stabilization of the injury.  
The helper must continue to manually stabilize the extremity while the EMS provider positions the immobilization device. Avoid gross movement of the injured extremity.
- Secure the device to the extremity.  
The splint must be applied in a manner that will immobilize the bones adjacent to the injury site. If the radius/ulna, wrist and/or hand is involved, ensure the hand is immobilized in the position of function.
- Assess for distal pulses, motor, and sensory function.  
The pulses, motor function, and sensory function must be re-evaluated after the splint is secured. Ask the patient to wiggle all their fingers or toes (distal to the injury site) and determine if they can sense your touch. Assess the skin color and temperature distal to the injury site. Also assess for pulses distal to the injury site and compare the strength of the pulse with the corresponding pulse on the opposite side of the body.