

# Assessment of Potential Fractures and Splinting

1. Approach the athlete and survey the scene for safety.
2. Perform a quick primary survey to assess for airway, breathing, and circulation.
3. Begin the secondary survey with a history from the athlete about how the injury happened and where the pain is located.
4. Inspect or observe the area for any swelling, deformity, or discoloration.
5. Progress to palpation by starting away from the potential fracture and moving toward the fracture site with gentle palpation.
6. Assess ability to move the area by performing range-of-motion with the athlete actively. Do not passively or resistively move the area.
7. If a fracture is suspected, splint the area with the appropriate splinting material.
  - a. Nondisplaced fracture
    - i. Prepare the splint and place a semi-rigid or padded splint material next to the athlete.
    - ii. Carefully move the injured area onto the splint.
    - iii. Secure the splint with an ace wrap to stabilize the area.
    - iv. Check for sensation. ("Can you feel me touch your fingers or toes?")
    - v. Check for circulation (check distal pulses or check capillary refill by squeezing the nailbed to see if it blanches and then returns to pink).
    - vi. Transport athlete safely to medical facility for treatment.
  - b. Displaced fractures
    - i. Secure a vacuum splint package appropriate for the limb size.
    - ii. Flatten the vacuum splint on the ground next to the athlete.
    - iii. Secure the splint to the athlete with the Velcro straps, keeping the limb in the position found. Do not attempt to straighten or bend a limb to make it look aligned prior to splinting!
    - iv. Use the vacuum pump to pull the air out of the splint until it hardens around the injured area (it will take on a look of cauliflower with slight bumps all over the splint).
    - v. Check for sensation. ("Can you feel me touch your fingers or toes?")
    - vi. Check for circulation (check distal pulses or check capillary refill by squeezing the nailbed to see if it blanches then returns to pink).
    - vii. Transport athlete safely to medical facility for treatment; may require ambulance if it is a lower extremity or major upper extremity injury.