## Spinal Injury Assessment

### **Clinical Indications:**

1. Suspicion of spinal or neurological injury

# Applies to: E EMT P Paramedic

### **Procedure:**

- 1. Have the patient extend both wrists and touch each finger to its thumb.
- 2. Have the patient flex each foot upward and down.
- 3. Ensure the patient has gross sensation in all extremities. Note any deficits.
- 4. Explain to the patient the actions that you are going to take when assessing the spine. Ask the patient to immediately report any pain verbally by answering questions with a verbal "yes" or "no" answer rather than shaking the head.
- 5. With the patient's spine supported to limit movement, begin palpation at the base of the skull at the midline of the spine.
- 6. Palpate the vertebrae individually from the base of the skull to the bottom of the sacrum.
- 7. On palpation of each vertebral body, look for evidence of pain and ask the patient if they are experiencing pain. If evidence of pain along the spinal column is encountered, the patient should be immobilized.

#### **Risk Assessment:**

- 1. History of high-velocity blunt injury increases spinal injury risk.
- 2. Axial load injury to the head (e.g., diving) increases spinal injury risk.
- 3. Low-velocity injuries such as falls from a standing position or lower-velocity motor vehicle accidents have increased risk in patients 55 and older.