

## Injury Assessment Techniques: Competencies Check-list

Name \_\_\_\_\_ Period \_\_\_\_\_

### Assessment Techniques

\_\_\_\_\_ Vital Signs

\_\_\_\_\_ Foot

\_\_\_\_\_ Ankle

\_\_\_\_\_ Leg

\_\_\_\_\_ Knee

\_\_\_\_\_ Thigh / Hip

\_\_\_\_\_ Shoulder / Upper Arm

\_\_\_\_\_ Elbow / Forearm

\_\_\_\_\_ Hand / Wrist / Fingers

\_\_\_\_\_ Head

\_\_\_\_\_ Face

\_\_\_\_\_ Cervical Spine

\_\_\_\_\_ Low Back

\_\_\_\_\_ Abdomen/Thorax

## **Vital Signs Assessment**

### **Pulse**

- \_\_\_\_\_ Takes pulse at carotid and radial arteries.
- \_\_\_\_\_ Demonstrates proper palpation with fingers.
- \_\_\_\_\_ Properly calculates pulse rate (beats in 15 sec. x 4 = bpm)

### **Respirations**

- \_\_\_\_\_ Checks respiration rate (discretely).
- \_\_\_\_\_ Properly calculates respiration rate (breaths in 30 sec. x 2 = rr)

### **Blood Pressure**

- \_\_\_\_\_ Properly places blood pressure cuff and stethoscope on both arms.
- \_\_\_\_\_ Proper use of BP cuff and stethoscope.
- \_\_\_\_\_ Accurately records / reports blood pressure reading.

### **Pupils**

- \_\_\_\_\_ Reaction to light.
- \_\_\_\_\_ Equality of pupils.
- \_\_\_\_\_ Determines presence or absence of nystagmus.

## **Foot Injury Assessment**

### **History**

- \_\_\_\_\_ Location of Pain
- \_\_\_\_\_ Weakness – tingling - impairment
- \_\_\_\_\_ How and When did the injury occur or start?
- \_\_\_\_\_ Mechanism of Injury (MOI)
- \_\_\_\_\_ Onset and Timing – gradual or immediate.
- \_\_\_\_\_ Previous Injury and/or surgery
- \_\_\_\_\_ Type and quality of footwear
- \_\_\_\_\_ Training surfaces / terrain
- \_\_\_\_\_ Changes in training

### **Observation**

- \_\_\_\_\_ Bilateral comparison – swelling, deformity, trauma, discoloration, redness
- \_\_\_\_\_ Postural alignment
- \_\_\_\_\_ Structural arrangement – pes planus vs pes cavus vs hallux valgus
- \_\_\_\_\_ Functional limitations

### **Palpation**

- \_\_\_\_\_ Calcaneus (Heel bruise, Plantar Fasciitis, and Sever's Dz)
- \_\_\_\_\_ Navicular-scaphoid b. (other tarsals, also)
- \_\_\_\_\_ Metatarsals (especially base of 5<sup>th</sup> → Jones Fx)
- \_\_\_\_\_ Phalanges
- \_\_\_\_\_ MTP jts (1<sup>st</sup> MTP → turf toe or bunion...5<sup>th</sup> MTP → Tailor's bunion/bunionette)
- \_\_\_\_\_ Sesamoid bones (plantar surface of 1<sup>st</sup> metatarsal head)
- \_\_\_\_\_ Arches (Med. Long., Metatarsal, Transverse, and Lateral Long. Arches)

### **Stress / Special Tests**

- \_\_\_\_\_ Active (AROM) and Passive (PROM) range of motion – toes
- \_\_\_\_\_ Metatarsal squeeze test → rule out FX
- \_\_\_\_\_ Ability to bear weight / balance
- \_\_\_\_\_ Walking Gait
- \_\_\_\_\_ Walk – stand on toes - jog – hop - run

## Ankle Injury Assessment

### History

- \_\_\_\_\_ Exact location and intensity of Pain (rank pain 1-10)
- \_\_\_\_\_ Primary complaint
- \_\_\_\_\_ When and where did the injury occur or start?
- \_\_\_\_\_ How did injury occur ... Mechanism of Injury (MOI)
- \_\_\_\_\_ Did you hear or feel a “pop” or “snap” or “crack”?
- \_\_\_\_\_ Onset and Timing – gradual or immediate.
- \_\_\_\_\_ Previous Injury and/or surgery

### Observation

- \_\_\_\_\_ Bilateral comparison – swelling, deformity, trauma, discoloration, redness
- \_\_\_\_\_ Postural alignment of feet
- \_\_\_\_\_ Functional limitations

### Palpation

- \_\_\_\_\_ Tibia and Fibula (proximal to distal)
- \_\_\_\_\_ Metatarsals (especially base of 5<sup>th</sup> → Jones Fx)
- \_\_\_\_\_ *Medial* → Deltoid Lig, Med. Malleolus, spring lig & Sustentaculum tali
- \_\_\_\_\_ *Posterior* → Calcaneus / Calcaneal {Achilles} Tendon
- \_\_\_\_\_ *Lateral* → Lateral Malleolus, ATF lig., CF lig., PTF lig., Peroneal Tubercle
- \_\_\_\_\_ *Anterior* → Anterior Tib-Fib lig. and Anterior compartment tendons

### Stress / Special Tests

- \_\_\_\_\_ ROM (active, passive, resistive) → DF/PF, INV/EV, & Circumduction
- \_\_\_\_\_ Fracture tests → tib-fib squeeze, metatarsal squeeze, bump test, Kleiger’s, percussion
- \_\_\_\_\_ Anterior Drawer test (ATF lig.)
- \_\_\_\_\_ Eversion test (deltoid lig.)
- \_\_\_\_\_ Inversion test (CF lig.)
- \_\_\_\_\_ Talar tilt test (ATF + CF lig.)
- \_\_\_\_\_ Kleiger’s Test {external foot rotation test} (ant. Tib-fib lig. and fib Fx test)
- \_\_\_\_\_ Thompson test (prone “calf squeeze” for Calcaneal tendon { Achilles } injury)
- \_\_\_\_\_ Ability to bear weight / balance
- \_\_\_\_\_ Functional testing (walk, jog, hop, run, circles, zig-zag, sport-specific)

## **Leg Injury Assessment**

### **History**

- \_\_\_\_\_ Location of Pain
- \_\_\_\_\_ Weakness – tingling - impairment
- \_\_\_\_\_ Where and when did the injury occur or start?
- \_\_\_\_\_ How did it occur...Mechanism of Injury (MOI)
- \_\_\_\_\_ Onset and Timing – gradual or immediate.
- \_\_\_\_\_ Previous Injury and/or surgery
- \_\_\_\_\_ Type and quality of footwear
- \_\_\_\_\_ Training surfaces / terrain
- \_\_\_\_\_ Changes in training

### **Observation**

- \_\_\_\_\_ Bilateral comparison – swelling, deformity, trauma, discoloration, redness
- \_\_\_\_\_ Postural alignment
- \_\_\_\_\_ Structural arrangement – pes planus - pes cavus - hallux valgus
- \_\_\_\_\_ Functional limitations

### **Palpation**

- \_\_\_\_\_ Tibia and Fibula (proximal to distal)
- \_\_\_\_\_ Anterior muscles (ant. compartment syndrome, shin splints)
- \_\_\_\_\_ Lateral muscles (peroneal muscles)
- \_\_\_\_\_ Superficial posterior muscles (Gastrocnemius & soleus)
- \_\_\_\_\_ Deep posterior / medial muscles (MTSS)
- \_\_\_\_\_ Calcaneal {Achilles} tendon
- \_\_\_\_\_ Pulses (posterior tibial and dorsal pedal)

### **Stress / Special Tests**

- \_\_\_\_\_ ROM (active, passive, resistive) → DF/PF, INV/EV, & Circumduction
- \_\_\_\_\_ Fracture tests (tib-fib squeeze and percussion)
- \_\_\_\_\_ Resistive ROM (DF/PF, Inv/Ev)
- \_\_\_\_\_ Thompson test (prone “calf squeeze” for Calcaneal {Achilles} tendon injury)
- \_\_\_\_\_ Gastrocnemius tightness (straight knee calf stretch)
- \_\_\_\_\_ Soleus tightness (bent knee calf stretch)
- \_\_\_\_\_ Ability to bear weight / balance
- \_\_\_\_\_ Functional testing (walk, jog, hop, run, circles, zig-zag, sport-specific)

## Knee Injury Assessment

### History

- \_\_\_\_\_ Exact location and intensity of Pain (rank pain 1-10)
- \_\_\_\_\_ Primary complaint
- \_\_\_\_\_ When and where did the injury occur or start?
- \_\_\_\_\_ How did injury occur ... Mechanism of Injury (MOI)
- \_\_\_\_\_ Did you hear or feel a “pop” or “snap” or “crack”?
- \_\_\_\_\_ Onset and Timing – gradual or immediate.
- \_\_\_\_\_ Type and quality of footwear
- \_\_\_\_\_ Previous Injury and/or surgery

### Observation

- \_\_\_\_\_ Bilateral comparison – swelling, deformity, trauma, discoloration, redness
- \_\_\_\_\_ Postural alignment (varum, valgum, recurvatum, inability to fully extend)
- \_\_\_\_\_ Functional limitations

### Palpation

- \_\_\_\_\_ Anterior (Patella, patellar tendon, tibial tuberosity, quadriceps m.)
- \_\_\_\_\_ Lateral (LCL, Lat. Epicondyle, ITB, Gerdy’s tubercle, head of fibula, biceps fem.)
- \_\_\_\_\_ Lateral joint line + lateral meniscus
- \_\_\_\_\_ Medial (MCL, Med. Epicondyle, Pes Anserine, Semitend/Semimembr.)
- \_\_\_\_\_ Medial joint line + medial meniscus

### Stress / Special Tests

- \_\_\_\_\_ Active and Passive ROM (knee Ext/Flex)
- \_\_\_\_\_ Active Quad and Hamstring contraction
- \_\_\_\_\_ Patellar apprehension (subluxation) and grind (chondromalacia) tests
- \_\_\_\_\_ Valgus test (full extension and 30 deg. Flexion → MCL)
- \_\_\_\_\_ Varus test (full extension → LCL)
- \_\_\_\_\_ Lachman’s test (best test for ACL)
- \_\_\_\_\_ Anterior Drawer test (ACL)
- \_\_\_\_\_ Posterior Drawer & Sag (Godfrey’s) tests (PCL)
- \_\_\_\_\_ McMurray’s test (meniscus injury)
- \_\_\_\_\_ Apley’s compression/distraction tests (comp → meniscus; distr → lig./capsule)
- \_\_\_\_\_ Renne’s test (squat → pain at lateral fem epicondyle → IT band friction)
- \_\_\_\_\_ Noble’s test (ITB; supine, knee is passively extended while applying pressure to lat epicondyle)
- \_\_\_\_\_ Ober Test (side-lying + passive hip ext/abd; IT Band tightness → leg remains in abd)
- \_\_\_\_\_ Functional testing (walk, jog, hop, run, duck-walk, sport-specific drills)
- \_\_\_\_\_ If swollen, unable to fully extend knee, or non- weight bearing → refer to MD

## Hip and Thigh Injury Assessment

### History

- \_\_\_\_\_ Exact location and intensity of Pain (rank pain 1-10)
- \_\_\_\_\_ Primary complaint
- \_\_\_\_\_ When and where did the injury occur or start?
- \_\_\_\_\_ How did injury occur ... Mechanism of Injury (MOI)
- \_\_\_\_\_ Did you hear or feel a “pop” or “snap” or “crack”?
- \_\_\_\_\_ Onset and Timing – gradual or immediate.
- \_\_\_\_\_ Previous Injury and/or surgery

### Observation

- \_\_\_\_\_ Bilateral comparison – swelling, deformity, trauma, muscle symmetry, etc.
- \_\_\_\_\_ Gait pattern
- \_\_\_\_\_ Functional limitations

### Palpation

- \_\_\_\_\_ Quadriceps (VMO, VL, Rectus Femoris)
- \_\_\_\_\_ Hamstrings (origins, muscle bellies, and insertions)
- \_\_\_\_\_ Hip Flexors (Rectus Femoris, iliopsoas, and Sartorius)
- \_\_\_\_\_ Hip Adductors (gracilis, adductor group, pubic symphysis)
- \_\_\_\_\_ Hip Abductors (gluteus medius, tensor fascia lata, and IT Band)
- \_\_\_\_\_ Hip Extensors (Gluteus maximus and hamstrings, ischial tubercle)
- \_\_\_\_\_ Iliac Crest (Hip pointer)
- \_\_\_\_\_ ASIS (anterior superior iliac spine → Sartorius origin)
- \_\_\_\_\_ Greater Trochanter (bursitis / tendinitis / snapping hip / IT Band friction)
- \_\_\_\_\_ Sacroiliac joint

### Stress / Special Tests

- \_\_\_ Active, Passive, and Resistive Muscle tests
  - \_\_\_\_\_ Quadriceps      \_\_\_\_\_ Hamstring      \_\_\_ Adductors
  - \_\_\_\_\_ Abductors      \_\_\_\_\_ Hip Flexors      \_\_\_ Tailor’s position (Sartorius)
- \_\_\_\_\_ Hip Extension w/ bent knee → gluteus maximus    \_\_\_ Hip Extension w/ straight leg → hamstrings
- \_\_\_\_\_ Check sensations (dermatomes)
- \_\_\_\_\_ Kendall test (supine, 1 knee flexed to chest, flat back → hip flexor tightness)
- \_\_\_\_\_ Thomas test (supine, legs extended, hand under back + thigh to chest → contracture)
- \_\_\_\_\_ Trendelenburg’s test (standing 1-leg balance → gluteus medius weakness)
- \_\_\_\_\_ Piriformis test (side-lying on unaffected; 60 hip flex, stabilize pelvis + IR/ADD)
- \_\_\_\_\_ Patrick (FABER) test (supine, hip ER with knee at 90; push down on knee and opposite ASIS → pain SI)
- \_\_\_\_\_ Pelvic Compression (Ant/Post and medial iliac compression, pain → SI and/or pelvis Fx)
- \_\_\_\_\_ Functional drills and sport-specific activities

## **Shoulder Injury Assessment**

### **History**

- \_\_\_\_\_ Exact location and intensity of Pain (rank pain 1-10)
- \_\_\_\_\_ Primary complaint
- \_\_\_\_\_ When and where did the injury occur or start?
- \_\_\_\_\_ How did injury occur ... Mechanism of Injury (MOI)
- \_\_\_\_\_ Did/do you hear or feel a “pop” or “snap” or “crack”?
- \_\_\_\_\_ Onset and Timing – gradual or immediate.
- \_\_\_\_\_ Previous Injury and/or surgery

### **Observation**

- \_\_\_\_\_ Bilateral comparison – swelling, deformity, trauma, discoloration, redness
- \_\_\_\_\_ Carrying Posture
- \_\_\_\_\_ Functional limitations

### **Palpation**

- \_\_\_\_\_ Clavicle and sternoclavicular (SC) jt.
- \_\_\_\_\_ Acromioclavicular (AC) jt. and Acromion process (AC sprain vs shoulder pointer)
- \_\_\_\_\_ Proximal Humerus and Glenohumeral (GH) jt.
- \_\_\_\_\_ Muscles – deltoid, trapezius, pectoralis major, latissimus dorsi, serratus
- \_\_\_\_\_ Rotator Cuff (SITS -insertion points and Individual muscles) and Scapula.

### **Stress / Special Tests**

Active, Resistive, and Passive ROM (all movements)

- \_\_\_\_\_ Abduction/Adduction
- \_\_\_\_\_ Flexion/Extension
- \_\_\_\_\_ Protraction/Retraction
- \_\_\_\_\_ Elevation/Depression
- \_\_\_\_\_ Int. and Ext. Rotation
- \_\_\_\_\_ Circumduction
- \_\_\_\_\_ Apley’s Scratch Tests
- \_\_\_\_\_ Apprehension test (GH subluxation/dislocation – 90 deg, ABD, then ER)
- \_\_\_\_\_ Sulcus Test (athlete actively reaches towards floor – look for gap at GH)



- \_\_\_\_\_ AC Distraction Test (look for “drop off” between clavicle and acromion)
- \_\_\_\_\_ AC Compression Test (press clavicle/scapula in ant/post direction...also indicates SC)
- \_\_\_\_\_ Drop Arm Test (supraspinatus)
- \_\_\_\_\_ Empty Can Test (supraspinatus: abd + 30 degrees horizontal flex + IR...press downward)
- \_\_\_\_\_ Hawkins-Kennedy Test (impingement: horizontally flex arm to chest + int. rotation)
- \_\_\_\_\_ Neer’s Test (impingement: passive abduction/flexion in overhead position)
- \_\_\_\_\_ Glenoid Labrum Clunk Test (supine, arm abduction+ axial compression + passive IR/ER for “clicks”)
- \_\_\_\_\_ Scapular Winging Test (wall push-up or push-up position; long thoracic N. palsy)
- \_\_\_\_\_ Speed’s Test (palm up, flex shoulder against resistance → Long biceps tendinitis)
- \_\_\_\_\_ Yergason’s Test (resist elbow flexion w/ GH ext rot → biceps sublux/tendinitis)
- \_\_\_\_\_ Adson’s Test (radial pulse + arm ext + athlete looks back toward arm)  
(thoracic outlet compression syndrome)
- \_\_\_\_\_ Allen Test (radial pulse + arm ext + athlete looks back in opposite direction)  
(thoracic outlet compression syndrome)
- \_\_\_\_\_ Functional Testing (wt-bearing, sport-specific, throwing, etc.)

## **Elbow Injury Assessment**

### **History**

- \_\_\_\_\_ Exact location and intensity of Pain (rank pain 1-10)
- \_\_\_\_\_ Sensory / Motor function
- \_\_\_\_\_ When and where did the injury occur or start?
- \_\_\_\_\_ How did injury occur ... Mechanism of Injury (MOI)
- \_\_\_\_\_ Did/do you hear or feel a “pop” or “snap” or “crack”?
- \_\_\_\_\_ Onset and Timing – gradual or immediate.
- \_\_\_\_\_ Previous Injury and/or surgery

### **Observation**

- \_\_\_\_\_ Bilateral comparison – swelling, deformity, trauma, discoloration, redness
- \_\_\_\_\_ Carrying Posture (carrying angle)
- \_\_\_\_\_ Functional limitations

### **Palpation**

- \_\_\_\_\_ Humerus (shaft and epicondyles)
- \_\_\_\_\_ Ulna (shaft and olecranon)
- \_\_\_\_\_ Radius (shaft and head)
- \_\_\_\_\_ Ligaments (ulnar and radial collateral lig.)
- \_\_\_\_\_ Muscles – elbow flex/ext, wrist flex/ext, pronators/supinators

### **Stress / Special Tests**

- Active, Resistive, and Passive ROM (all movements)
  - \_\_\_\_\_ Elbow – flex/ext
  - \_\_\_\_\_ Forearm – pronation/supination
  - \_\_\_\_\_ Fingers – ext/flex
- \_\_\_\_\_ Valgus Stress test (MCL)
- \_\_\_\_\_ Varus Stress Test (LCL)
- \_\_\_\_\_ Medial Epicondylitis test (Elbow flexed to 45 degrees + wrist flexion with resistance.)
- \_\_\_\_\_ Lateral Epicondylitis test (Elbow flexed to 45 degrees + wrist extension with resistance.)
- \_\_\_\_\_ Tinel’s sign (tap on ulnar nerve)
- \_\_\_\_\_ Functional testing

## Hand / Wrist / Fingers Injury Assessment

### History

- \_\_\_\_\_ Exact location and intensity of Pain (rank pain 1-10)
- \_\_\_\_\_ Sensory/motor function
- \_\_\_\_\_ How did injury occur ... Mechanism of Injury (MOI)
- \_\_\_\_\_ Previous Injury and/or surgery

### Observation

- \_\_\_\_\_ Bilateral comparison – swelling, deformity, trauma, discoloration, redness
- \_\_\_\_\_ Hand Posture – resting position, loose fist, and clenched fist
- \_\_\_\_\_ Functional limitations

### Palpation

- \_\_\_\_\_ Forearm - shaft and distal radius/ulna
- \_\_\_\_\_ Hand – metacarpals
- \_\_\_\_\_ Fingers - MCP/PIP/DIP joints and phalanges
- \_\_\_\_\_ Wrist – carpals (SLTPPTCH)
- \_\_\_\_\_ Thumb – 1<sup>st</sup> MPT jt and UCL
- \_\_\_\_\_ Anatomical Snuffbox

### Stress / Special Tests

#### Active, Resistive, and Passive ROM

- \_\_\_\_\_ Wrist -flex/ext and R/U deviation
- \_\_\_\_\_ Forearm – pronation/supination
- \_\_\_\_\_ Valgus / Varus Stress to PIP/DIP jts
- \_\_\_\_\_ Volar plate test (passive hyperextension of PIP)
- \_\_\_\_\_ Mallet finger test (isolated active DIP extension)
- \_\_\_\_\_ Flexor Digitorum Profundus (Flex DIP) / Flex. Dig. Superficialis (Flex PIP) tests
- \_\_\_\_\_ Phalen's test (hands back to back x 1min; pain/numb → poss. Carpal tunnel)
- \_\_\_\_\_ Tinel's test (tap median N.)
- \_\_\_\_\_ Murphy's sign (if 3<sup>rd</sup> knuckle level w/ others → possible lunate dislocation)
- \_\_\_\_\_ Functional testing

# Head Injury Assessment

## History

- \_\_\_\_\_ Level of Consciousness / ABC's
- \_\_\_\_\_ When, where, and how did the injury occur or start?
- \_\_\_\_\_ Headache                      \_\_\_\_\_ Dizzy                      \_\_\_\_\_ Nausea
- \_\_\_\_\_ Tingling/numbness                      \_\_\_\_\_ Weakness                      \_\_\_\_\_ Tinnitus
- \_\_\_\_\_ Previous Injury

## Observation

- \_\_\_\_\_ Skin – color, quality, trauma, discoloration, bleeding, etc.
- \_\_\_\_\_ Unequal / dilated pupils                      \_\_\_\_\_ Movement of extremities
- \_\_\_\_\_ Respiratory rate and pattern                      \_\_\_\_\_ CSF – cerebral spinal fluid (ear, nose)
- \_\_\_\_\_ Battle's Sign (discoloration behind ear → skull Fx)
- \_\_\_\_\_ Raccoon eyes (discoloration under eyes → skull Fx)
- \_\_\_\_\_ Halo Sign (CSF in blood → double-ringed stain → basilar skull fracture)

## Palpation

- \_\_\_\_\_ Skull – Face – Neck (swelling, crepitus, tenderness, deformity, etc.)
- \_\_\_\_\_ Pulse – rate and quality

## Special Tests

**Concussion Testing** → **SCAT-3** (use SCAT-3 form)

### **Cranial Nerve Testing**

- \_\_\_\_\_ Visual acuity (static and dynamic)                      \_\_\_\_\_ Eye Tracking (up/down, L/R, Diag.)
- \_\_\_\_\_ PEARL                      \_\_\_\_\_ Speak                      \_\_\_\_\_ Smile/Kiss
- \_\_\_\_\_ Raise eyebrows                      \_\_\_\_\_ Stick out tongue                      \_\_\_\_\_ Shrug Shoulders

### **Sensory, Motor, and Coordination Testing**

- \_\_\_\_\_ Double and Single Leg balancing                      \_\_\_\_\_ Heel/Toe walking
- \_\_\_\_\_ Fingers to nose (eyes open + closed)                      \_\_\_\_\_ Romberg's Test                      \_\_\_\_\_ BESS

### **Determine Mental status**

- \_\_\_\_\_ Days of week / months                      \_\_\_\_\_ 3-word recall
- \_\_\_\_\_ Serial 7's (subtract from 100)                      \_\_\_\_\_ Orientation (where, who, how, etc)



## Cervical Spine Injury Assessment

### History

- \_\_\_\_\_ Level of Consciousness / ABC's
- \_\_\_\_\_ When, where, and how did the injury occur or start?
- \_\_\_\_\_ Sensations / Tingling / Numbness
- \_\_\_\_\_ Previous Injury

### Observation

- \_\_\_\_\_ Ability / inability to move
- \_\_\_\_\_ Obvious deformity
- \_\_\_\_\_ Alignment / position of neck and spine

### Palpation

- \_\_\_\_\_ Vertebrae (include spinous processes)
- \_\_\_\_\_ Muscles

### Special Testing

**Sensory Testing (Dermatomes)** What am I doing? and sharp vs dull.

- \_\_\_\_\_ Deltoid patch (C5)
- \_\_\_\_\_ Middle finger (C7)
- \_\_\_\_\_ Medial Forearm (T1)
- \_\_\_\_\_ Thumb / 2<sup>nd</sup> phalanges (C6)
- \_\_\_\_\_ 4<sup>th</sup>/5<sup>th</sup> fingers (C8)

**Motor Testing (Myotomes)**

- \_\_\_\_\_ Shoulder abduction (C5)
- \_\_\_\_\_ Wrist flexion (C7)
- \_\_\_\_\_ Finger abduction (T1)
- \_\_\_\_\_ Wrist extension (C6)
- \_\_\_\_\_ Finger flexion (C8)

### Non-Emergency Neck Injuries

Active, Passive, and Resistive ROM

- \_\_\_\_\_ Flex/Ext      \_\_\_\_\_ Lateral Flexion      \_\_\_\_\_ Rotation
- \_\_\_\_\_ Cervical Compression Test (neutral, slight extension, and lat. flexion)
- \_\_\_\_\_ Cervical Distraction Test (increase pain → probable sprain)
- \_\_\_\_\_ Brachial Plexus Stretch Test (shoulder depression + opposite lat. neck flexion)

## Low Back (Lumbo-sacral) Injury Assessment

### History

- \_\_\_\_\_ When, where, and how did the injury occur or start?
- \_\_\_\_\_ Location and intensity of pain                      \_\_\_\_\_ Can victim move extremities?
- \_\_\_\_\_ Sensations / Tingling / Numbness                      \_\_\_\_\_ Previous Injury

### Observation

- \_\_\_\_\_ Ability / inability to move    \_\_\_\_\_ Obvious deformity
- \_\_\_\_\_ Alignment / position of spine and hips

### Palpation

- \_\_\_\_\_ Bones – ilia, sacrum, lumbar vertebrae    \_\_\_\_\_ Muscles (spasm/tightness)
- \_\_\_\_\_ Level of Hips (iliac crests)    \_\_\_\_\_ Sacro-iliac jts
- \_\_\_\_\_ Sciatic notch (slide-lying, hip flex + knee flex, palpate between greater trochanter and ischial tub.)

### Special Testing

Sensory Testing (Dermatomes) What am I doing? and sharp vs dull.

#### Motor Testing (Myotomes)

- \_\_\_\_\_ Hip flexion (L1-2)    \_\_\_\_\_ Knee extension (L3)
- \_\_\_\_\_ Dorsiflexion (L4)    \_\_\_\_\_ Toe extension (L5)
- \_\_\_\_\_ Plantar flexion (S1)    \_\_\_\_\_ Knee flexion (S2)

#### Back ROM

- \_\_\_\_\_ flex/ext                      \_\_\_\_\_ Lateral flexion                      \_\_\_\_\_ Rotation

#### Hip/Thigh ROM

- \_\_\_\_\_ hip flex (bent knee)                      \_\_\_\_\_ hip ext                      \_\_\_\_\_ hip IR/ER
- \_\_\_\_\_ Thomas Test (one knee to chest; look for opposite leg to lift off table)

#### Strength (as tolerated)

- \_\_\_\_\_ prone back extension (paraspinals)
- \_\_\_\_\_ ¼ sit-up                      \_\_\_\_\_ oblique ¼ sit-up

### Other tests

- \_\_\_\_\_ Straight Leg Raise (supine)
- \_\_\_\_\_ Patrick Test (supine, fig-4 → SI pain)
- \_\_\_\_\_ Sacroiliac rocking test (opposite knee to shoulder)
- \_\_\_\_\_ Sciatic N. test (knee ext + hip flex + dorsiflexion; palpate popliteal space)
- \_\_\_\_\_ Leg length discrepancy (ASIS to medial malleolus = actual)
- \_\_\_\_\_ Trendelenburg test (single-leg balance, look for hip drop → glut. Med weakness)
- \_\_\_\_\_ Reflex testing – patellar and Achille's tendons

## **Abdominal / Thoracic Injury Assessment**

### **History**

- \_\_\_\_\_ Determine responsiveness / ABC's
- \_\_\_\_\_ When, where, and how did the injury occur or start?
- \_\_\_\_\_ Location, intensity, and quality of Pain (URQ, ULQ, LRQ, LLQ)
- \_\_\_\_\_ Progression of signs/symptoms
- \_\_\_\_\_ Sensations / Tingling
- \_\_\_\_\_ Previous Injury

### **Observation**

- \_\_\_\_\_ Ability / inability to move
- \_\_\_\_\_ Signs of trauma
- \_\_\_\_\_ Respiratory rate/pattern/difficulties
- \_\_\_\_\_ Observe for S/S of shock (pale, moist, rapid pulse, etc.)
- \_\_\_\_\_ Hemoptysis (coughing blood)
- \_\_\_\_\_ Hematemesis (vomiting blood)

### **Palpation**

- \_\_\_\_\_ Chest – rib pain, tenderness, crepitus, swelling, etc.
- \_\_\_\_\_ Abdomen – rigidity, “guarding”, rebound tenderness

### **Special Testing**

#### **Thorax**

- \_\_\_\_\_ Location of pain (spleen, liver, kidney, fracture, etc)
- \_\_\_\_\_ Auscultation
- \_\_\_\_\_ Compression Tests (ant/post and lateral)

#### **Abdomen**

- \_\_\_\_\_ Kehr's sign (pain in left shoulder/arm → spleen)
- \_\_\_\_\_ Rebound tenderness (LRQ = appendicitis)
- \_\_\_\_\_ Murphy's test (URQ compression under ribs → liver inflamm/injury)
- \_\_\_\_\_ Auscultation (absence of bowel sounds may indicate bleeding)
- \_\_\_\_\_ Percussion
- \_\_\_\_\_ Trunk ROM (flexion, extension, lateral flexion, and rotation)