



# EMT Skill Sheet

## Skill #7 - Traction Splinting Sager or Hare (circle one used)

Student Name: \_\_\_\_\_

Pass date - \_\_\_\_\_

Evaluator Name \_\_\_\_\_ Signature: \_\_\_\_\_

(Sign if Student Passes Skill)

Date

Dispatched:	Patient Contact:	Transport:	End of Call:	Date
Information on this skill can be found in the Text Book and on the class D2L website				<b>Comments</b>
<b>SCENE SIZE-UP – Starts prior to Patient contact but continues throughout the call</b>				
Takes, or verbalizes, body substance isolation precautions of Gloves and Eye Protection ( <b>Critical Fail!</b> )				
Verbalizes Scene Size-up (Information from Dispatch and EMRs) – Safety ( <b>Critical Fail!</b> ), Mechanism of Injury (MOI) – C-spine needed, Nature of Illness (NOI), Additional Resources, # of Patients				
<b>PRIMARY ASSESSMENT (Primary Survey/Initial Assessment) - Done On Scene</b>				
General Impression of the scene, patient & gathers information from EMRs or bystanders. Must observe: <ul style="list-style-type: none"> <li>✓ Unusual Environmental Factors (Hazards, Odors/Temperature, Lighting, Entrances/Exits, People)</li> <li>✓ Patient's approximate Age, Sex, and Mental Status/ LOC (Level of Consciousness)</li> <li>✓ Patient's Positioning, Level of Distress (Breathing/Pain), and any Gross Injuries seen</li> </ul> Looking for Arterial Bleeding and <i>≈If necessary</i> - applying bleeding control as soon as possible				
Considers C-spine (Spinal Motion Restriction) for the Patient ( <b>Critical Fail!</b> ) – When in doubt – C-spine EMT should evaluate the scene for MOI (Mechanism of Injury). Does patient meet any of the following; <ul style="list-style-type: none"> <li>✓ Significant MOI (MVC at high speed, Falls&gt;20 feet) with Neck/Back Pain or Neurological deficit</li> <li>✓ Unresponsive/AMS (Altered Mental Status or Drugs/ETOH) patients with unknown history of event</li> <li>✓ Water related accidents, head/neck injuries, hangings</li> </ul> If Yes to the above - Tell patient not to move and directs an EMT to hold manual stabilization (Skill #4)				
<b>Evaluator states Patient involved with Trauma of Significant MOI</b>				
Informs patient not to move and directs an EMT to maintain manual immobilization of head in a neutral in-line position – Verbalizes patient will be placed in C-spine after primary assessment				
Identifies self by Name, Level of Medical training, Agency and gets Patient's Consent (Expressed/Implied)				
Asks Patient – Name, Age and Chief Complaint <ul style="list-style-type: none"> <li>• Determines patient's condition &amp; considers calling for ALS if necessary</li> </ul>				
Determines responsiveness of Patient by AVPU - May visualize for signs of Breathing at this time <ul style="list-style-type: none"> <li>✓ Awake - If patient is Alert must ask Person, Place, Time and Event orientation questions</li> <li>✓ Responses to Verbal – check to see if patient can follow commands or answer questions</li> <li>✓ Physical then Pain - check to see if patient can follow commands, open eyes or answer questions</li> <li>✓ Unresponsive – <b>NO</b> response to Painful stimulus (Do no harm – neck/ear pinch, push bone above eye)</li> </ul>				
<i>≈If necessary</i> - If patient is Unresponsive to Pain start with Circulation not Airway (2010 ECC BLS)				
<b>Airway</b> - Assesses and Fixes ( <b>Critical Fail!</b> ) <ul style="list-style-type: none"> <li>✓ Listen for noise – snoring, stridor, gurgling, wheeze</li> <li>✓ Smell for odors – ETOH (alcohol), emesis, ketones, unusual odors (must be within 3 feet of Head)</li> <li>✓ <b>Ask if patient if they are nauseated or had emesis if awake</b></li> </ul> Considers if Airway is Good (Adequate) or Bad (Inadequate) <ul style="list-style-type: none"> <li>➤ <b>Signs/Symptoms (s/s) that Airway is Patent/Adequate</b> – Patient is awake and maintaining their own airway, no abnormal noises heard (stridor, snoring, gurgling), Patient can speak clearly, No oral trauma or obstructions (blood, vomit, fluid, swelling) are noted</li> <li>➤ <b>Signs/Symptoms that Airway is Inadequate</b> – Diminished level of responsiveness, Abnormal noises heard (stridor, snoring, gurgling), Drooling, Difficulty talking or speaking clearly, Actively vomiting</li> </ul> If Airway is Inadequate or Patient with Altered Mental Status (AMS) - Open mouth and look for Obstruction – broken teeth, dentures, edema, emesis, blood (use light pen) <i>≈If necessary</i> – Fixes Airway (Skill #2) <ul style="list-style-type: none"> <li>• Suctions patient as needed</li> <li>• Open and maintain airway with Head-Tilt Chin-Lift/Jaw-Thrust if patient is not maintaining Airway due to decreased mental status</li> </ul> Considers Airway Adjunct for all Patient's with AMS - OPA or NPA				

<p><b>Breathing</b> - Assesses and Fixes (<b>Critical Fail!</b>) – This may be done in Mental status assessment          Considers if Breathing is Good (Adequate) or Bad (Inadequate)</p> <ul style="list-style-type: none"> <li>✓ Looks for bilateral chest rise/listens for noisy breathing (Feels for chest rise in AMS patients)             <ul style="list-style-type: none"> <li>➤ <b>Breathing is Adequate</b> – Equal rise and fall of chest bilaterally, Non-labored, Patient is Awake with good mental status, no abnormal noise heard, breathing is full, appears to be a good rate (12-20), Pink dry skin, patient can speak in full sentences</li> <li>➤ <b>Breathing is Inadequate</b> – Labored breathing, Abnormal noises (stridor, wheezes, coughing, or noisy breathing), Bad rate (&lt;12 or &gt; 20), Shallow breathing, Patient is tripodding, using accessory muscles, Pale /cyanotic skin, unable to speak full sentences, (Nasal flaring, Grunting, Retractions, or Seesaw breathing - Kids) – patients with Decreased mental status should be carefully assessed</li> </ul> </li> <li>✓ <b>If Breathing is labored - Describes level of Dyspnea as Mild, Moderate or Severe (get SpO2)</b></li> </ul>		
<p>Considers Ventilation and Oxygen for the Patient – (<b>Critical Fail!</b>) (Skill #1)  <b>≈If patient has - Adequate Breathing &amp; No life threatening Complaint &amp;/or signs of Hypoxia/Shock</b></p> <ul style="list-style-type: none"> <li>✓ Oxygen therapy may not be required</li> <li><b>≈If patient has - Adequate Breathing but life threatening signs of Hypoxia or Shock</b></li> </ul> <p>Directs an EMT to provide O2 therapy and place SpO2 on patient (<b>keep SpO2 greater or equal to 94%</b>)</p> <ul style="list-style-type: none"> <li>✓ NC 1-6 LPM – Little Sick without Life Threatening Complaints or only mild Respiratory distress</li> <li>✓ NRM 15 LPM – Big Sick, Hypoxic, AMS, CO poisoning, Shock, or Respiratory distress (&gt;Mild)</li> <li>✓ Considers CPAP for moderate to severe Respiratory distress. Considers contraindications of CPAP</li> </ul> <p><b>≈If patient has - Signs of Inadequate Breathing (Slow, Shallow, Unequal/Inadequate chest rise)</b></p> <ul style="list-style-type: none"> <li>✓ Directs 2 EMT/EMRs to provide positive pressure ventilation with BVM (Oxygen at 15 LPM)</li> </ul>		
<p><b>Circulation</b> - Assesses and Fixes (<b>Critical Fail!</b>)</p> <ul style="list-style-type: none"> <li>✓ Pulse (<b>Verbalize the Strength, Speed-fast/slow, and Regularity</b>) assess for up to 10 seconds</li> <li>✓ Checks Skin signs (<b>Moisture/Color/Temperature</b>) and Cap Refill</li> <li>✓ Signs or symptoms of Shock must be treated in Primary assessment (Skill #5)</li> </ul>		
<p><b>Deformities</b> - Rapid Scan in all Patients (30-60 seconds) (<i>Trauma or AMS Patients use Skill #9</i>)</p> <ul style="list-style-type: none"> <li>✓ Head – Visualize for deformities. Visualize ears, nose and mouth for edema, trauma, bleeding or ecchymosis, and facial symmetry (ask patient to smile as needed)</li> <li>✓ Neck – Visualize for JVD, swelling or bleeding</li> <li>✓ Chest – Visualize equal rise &amp; fall of chest and ask Patient to take deep breath and move (non-trauma) for pleuritic pain             <ul style="list-style-type: none"> <li>• <i>EMT may check Lung Sounds (Bases &amp; Apexes) for Dyspneic or Chest Pain patients</i></li> </ul> </li> <li>✓ Abdomen – Ask patient if they have abdominal pain. Expose if patient complains of abdominal Pain             <ul style="list-style-type: none"> <li>• <i>EMT may palpate 4 quadrants of abdominal in assessment as needed</i></li> </ul> </li> <li>✓ Pelvis – Visualize for incontinence (urine/feces)</li> <li>✓ Extremities – (non-trauma) ask patient to move all extremities and check CMS* in all extremities</li> <li>✓ Posterior – Visualize for abnormalities, rash or Trauma and ask about neck/back pain</li> </ul> <p><b>≈If necessary - Provides bleeding control (Skill #5) or occlusive dressing (Critical Fail!)</b></p> <ul style="list-style-type: none"> <li>➤ Some EMTs just do a quick visual scan without palpation on awake medical/trauma Patients</li> <li>➤ Some EMTs expose and exam patient’s chief complaint area in Primary Assessment</li> <li>➤ *CMS – Circulation, Motor and Sensory Function (also called Neurovascular Function and PMS – Pulse/Motor/Sensory)</li> </ul>		
<p><b>Expose and Examine</b> - To the appropriate level (Age, Mental status, Injury, Environment)          Head and Chest should be exposed in Critical Patients (Head Coverings/Shirt)</p>		
<p>Consider and verbalizes to EMT partner(s) the following – Patient Priority (Life Threats) –</p> <ol style="list-style-type: none"> <li>1. Appears – Stable (Little Sick);             <ul style="list-style-type: none"> <li>➤ Mental Status &amp; ABCDs normal and no life threatening complaint(s)</li> </ul> </li> <li>2. Appears - Potentially Unstable (possible Big Sick);             <ul style="list-style-type: none"> <li>➤ Mental Status and ABCD good but has life threatening complaint(s)</li> </ul> </li> <li>3. Appears – Unstable (Big Sick);             <ul style="list-style-type: none"> <li>➤ Any abnormal Mental Status or abnormal ABCDs and/or has life threatening complaint(s)</li> </ul> </li> </ol> <ul style="list-style-type: none"> <li>✓ Inform team of Transport Decision. Stay &amp; Play or Load &amp; Go</li> </ul> <p><b>&lt;10 min on scene for Critical patients</b></p> <ul style="list-style-type: none"> <li>✓ Calls for ALS or any other additional resources that may be needed</li> <li>✓ Assign Tasks to Team Members (sometimes done in Scene Size up)             <ul style="list-style-type: none"> <li>• EMT #1 – Applies Splint</li> <li>• EMT #2 – Assist in Splinting</li> <li>• If other EMTs are available complete – Vital Signs, History, Demographics and Physical Exam</li> </ul> </li> </ul>		

**Note: The Evaluator informs the student that the secondary assessment has been done by another EMT and to stabilize the injury with a traction splint (Evaluator choses either Hare or Sager)**

**\*\* The following steps are completed for all traction splint applications \*\*\***

EMT verbalizes – Indications/Contra-Indications for Traction Splinting (names all)

- **Unstable patients (splint enroute if possible)**
- Should be used for mid-shaft femur fracture only
- Pelvis or Hip (proximal femur) injuries
- Patella Injuries or distal femur injuries
- Lower leg, foot, or ankle injuries
- Open Femur Fractures based on Local Protocols (Sacramento must call Base hospital)

Directs application of manual stabilization of the extremity above and below the injury

➤ If the EMT does not have a partner this can be verbalized

Assesses CMS\* or motor, sensory and circulatory function in the bilaterally extremities (**Critical Fail!**)

- ✓ Marks pedal pulses with pen (must know names and locations of pedal pulses)
- ✓ **DO NOT** do Pedal PUCH/PULLS for Broken Femurs for motor (Wiggle toes)
- **Must be done prior to moving the extremity! (Critical Fail!)**

Expose and examine entire extremity (visualize and palpate) both Proximal as well as Distal to the injury

- ✓ Removes shoes and socks, pants and underwear (pants/underwear may be verbalized in class)
- ✓ Examines and then palpates pelvis for instability (page 1041– Figure 29-42 in AAOS textbook)
  - Lateral compression
  - Anterior to Posterior palpation
  - Palpate the pubic symphysis with the palm of your hand (may be verbalized in class)
- ✓ Examines and then palpates proximal femur at greater trochanter for pain or deformity
- ✓ Examines and then palpates distal femur and patella for pain or deformity
- ✓ Examines and then palpates tibia and fibula, ankle and foot for pain or deformity

Splints in position found or position of function:

- ✓ Angulated long bone fractures should be gently returned to normal anatomical position unless significant pain or resistance is experienced
- If patient has an open fracture with exposed bone it is a contraindication for manipulating the limb if it will result in exposed bone ends to reenter skin – Splint in position found
- ✓ If extremity is repositioned student must reassesses motor, sensory and circulatory function in the injured extremity

*≈If necessary* - Applies a dressing to any open wounds with a dry sterile dressing

- Open Fractures with bones ends exposed should be covered with a moist sterile dressing to bone

Secures Patient to a long board for C-spine - If EMT does not have partners this may be verbalized

➤ This may be done/verbalized before or after Traction Splinting

**Use Page #4 and use appropriate skill application based on either Hare or Sager Traction splints**

➤ **There are other traction splint devices but the national standard is Hare and/or Sager**



<b>Hare Traction Splint application – use this if applying a Hare Traction splint</b>		
✓	Ankle hitch applied to injured extremity	
➤	Some textbooks and videos show this after pulling manual traction	
	EMT has partner pull manual traction and maintains till traction splint is applied	
	Places splint next to uninjured extremity and adjusts splint and locks to proper length and prepares straps	
➤	Distal end of splint extended approximate 8-10 inches from the heel of the foot	
	Positions splint under (posterior) of Injured extremity – heel stand should be collapsed	
	Pads the groin and hip and fastens the ischial strap first ( <b>Critical Fail!</b> )	
	EMT raises Heel stand and connects the ankle hitch to ratchet strap and carefully tightens the ratchet to pull traction ***** <b>DO NOT pull excessive traction – only verbalize</b>	
➤	EMT holding traction slowly release traction as ratchet is tightened to allow leg to settle onto splint	
➤	The ratchet strap must be straight and not twisted (over bar) - pulls traction without twisting the leg	
	Secures and checks support straps to injured extremity	
✓	No strap over injury and No strap over patella – must be 2 inches above and below knee	
•	May omit straps not needed	
•	Some textbooks state strapping order for support straps – proximal to distal	
	Secures the patient and the splint to the backboard in a way that will prevent movement of the splint during patient movement and transport	
✓	Must tape down Hare Traction splint to backboard independent of the patient	
	Assesses distal CMS* or motor, sensory and circulatory function in the injured extremity after splint is complete ( <b>Critical Fail!</b> )	
✓	Distal CMS* or motor, sensory and circulatory function should be reassessed every 5-15 minutes	
	Considers the use of Ice for pain control	
✓	Ice should not have direct contact with the skin	
	Contacts Medical Control and/or documents Standing Orders/Protocols followed	
<b>Sager Traction Splint application – use this if applying a Sager Traction splint</b>		
	Places splint next to uninjured extremity and adjusts splint to appropriate size just past the heel of foot	
➤	Some systems state in line manual traction of injured extremity should be applied (Sacramento)	
	Positions splint next to injured extremity (medial) – makes sure ankle hitch is in proper location	
	Pads the groin, hip and in-between leg and device and fastens the ischial strap first ( <b>Critical Fail!</b> )	
	Ankle hitch applied to injured extremity (Sager wheeled gage must be on side of injured leg)	
➤	Straps must not be twisted	
	Extend the splint shaft to pull traction to about 10% of patient’s body weight on gage	
✓	Must not pull more than 15 pounds of weight ( <b>Critical Fail!</b> )	
	<b>***If applying to a non-injured patient DO NOT pull excessive traction – only verbalize</b>	
	Place large elasticized straps under injured extremity and wrap to secure the splint to injured extremity	
➤	Textbooks/directions from manufacture show large elasticized straps <b>may</b> go over patella & injury	
➤	Some textbooks/directions state strapping order for large elasticized straps – distal to proximal	
•	May omit straps that are not needed – consider padding in-between leg and device	
	Pads between legs and secures legs together using large elasticized straps and/or ankle hitch in figure eight pattern	
	Secures the patient to the backboard in a way that will prevent movement of the splint during patient movement and transport	
	Assesses distal CMS* or motor, sensory and circulatory function in the injured extremity after splint is complete ( <b>Critical Fail!</b> )	
✓	Distal CMS* or motor, sensory and circulatory function should be reassessed every 5-15 minutes	
	Considers the use of Ice for pain control - Ice should not have direct contact with the skin	
	Contacts Medical Control and/or documents Standing Orders/Protocols followed	
	<b>More than 4 missed points results in Failure</b>	<b>Total Missed Points</b>
✓	Actions performed and/or verbalized by student when doing skill	
➤	Additional information on the procedure	
•	Key Points that student should know but do not need to verbalized/do unless asked	

\* CMS – Circulation, Motor and Sensory Function (also called Neurovascular Function and PMS – Pulse/Motor/Sensory)

Evaluator Comments: