

## AOSpine Curriculum for Spinal Trauma:

### Educational Advisor (EA) checklist for competencies & learning outcomes

AOSpine learning activities for spinal trauma focus on addressing common and critical patient problems. Specific learning outcomes for each activity must be defined by faculty according to the needs of the participants. During the course, the EA should decide if each competency and key learning outcome was covered (“No”, “Yes, partially”, or “Yes, fully”) and add any comments.

Course: \_\_\_\_\_ ED: \_\_\_\_\_

	Competency	Key learning outcome	Covered in course?	Comments
1	<b>Resuscitate the patient</b> according to ATLS® guidelines			
		<ul style="list-style-type: none"> <li>Maintain the patient’s oxygenation level</li> </ul>		
		<ul style="list-style-type: none"> <li>Administer IV fluids to the patient</li> </ul>		
		<ul style="list-style-type: none"> <li>Maintain normotension in the patient</li> </ul>		
		<ul style="list-style-type: none"> <li>Identify all other injuries</li> </ul>		
		<ul style="list-style-type: none"> <li>Prioritize the patient’s injuries</li> </ul>		
2	<b>Immobilize the spine</b> in a patient with a suspected spinal injury beginning at the scene of injury and during the assessment process			
		<ul style="list-style-type: none"> <li>Identify potentially unstable spinal injuries</li> </ul>		

		<ul style="list-style-type: none"> <li>Recognize that the unconscious patient may have a spinal cord injury</li> </ul>		
		<ul style="list-style-type: none"> <li>Recognize that any movement of the patient can result in neurological injury</li> </ul>		
		<ul style="list-style-type: none"> <li>Perform spinal immobilization</li> </ul>		
		<ul style="list-style-type: none"> <li>Maintain immobilization during imaging procedures and until stability is proven</li> </ul>		
<b>3</b>	<b>Examine the patient</b>			
		<ul style="list-style-type: none"> <li>Assess the patient's motor score</li> </ul>		
		<ul style="list-style-type: none"> <li>Assess the patient's ASIA/Frankel score</li> </ul>		
		<ul style="list-style-type: none"> <li>Perform a complete neurological assessment</li> </ul>		
		<ul style="list-style-type: none"> <li>Assess the patient for secondary injury</li> </ul>		
		<ul style="list-style-type: none"> <li>Identify spinal cord shock</li> </ul>		
		<ul style="list-style-type: none"> <li>Consider the prognostic importance of sacral sparing</li> </ul>		
		<ul style="list-style-type: none"> <li>Serially re-examine the patient for evolving injury</li> </ul>		
<b>4</b>	<b>Order appropriate imaging</b>			
		<ul style="list-style-type: none"> <li>Order x-rays, CT, MRI, and other imaging modalities based on indications, limitations, timing, and availability</li> </ul>		
		<ul style="list-style-type: none"> <li>Recognize the radiographic features of spinal instability</li> </ul>		
		<ul style="list-style-type: none"> <li>Recognize spinal cord edema and hematoma</li> </ul>		

5	<b>Classify the injury</b> according to fracture morphology, instability, and neurological status			
		<ul style="list-style-type: none"> <li>Identify the history and, where possible, the mechanism of injury</li> </ul>		
		<ul style="list-style-type: none"> <li>Describe the injury based on an image-based morphological classification</li> </ul>		
		<ul style="list-style-type: none"> <li>Recognize spinal instability</li> </ul>		
		<ul style="list-style-type: none"> <li>Assess the neurological status and identify neural compression/compromise</li> </ul>		
		<ul style="list-style-type: none"> <li>Assess the patient using the injury severity score</li> </ul>		
6	<b>Apply evidence-based decision making</b> to the management of the patient			
		<ul style="list-style-type: none"> <li>Choose the best operative and nonoperative treatment option for each patient</li> </ul>		
		<ul style="list-style-type: none"> <li>Select the treatment based on the available evidence</li> </ul>		
		<ul style="list-style-type: none"> <li>Consider the prognosis for neurological deficit</li> </ul>		
		<ul style="list-style-type: none"> <li>Recognize limitations of surgery skills and hospital resources</li> </ul>		
		<ul style="list-style-type: none"> <li>Refer the patient to another center when appropriate to improve care</li> </ul>		
7	<b>Reduce / decompress / stabilize</b> appropriately			
		<ul style="list-style-type: none"> <li>Consider and apply strategies to minimize soft-tissue disruption</li> </ul>		

		<ul style="list-style-type: none"> <li>• Perform reduction techniques</li> </ul>		
		<ul style="list-style-type: none"> <li>• Perform decompression techniques</li> </ul>		
		<ul style="list-style-type: none"> <li>• Perform stabilization techniques</li> </ul>		
		<ul style="list-style-type: none"> <li>• Decide the optimal timing for the intervention</li> </ul>		
		<ul style="list-style-type: none"> <li>• Recognize regional/junctional differences</li> </ul>		
		<ul style="list-style-type: none"> <li>• Recognize spinal osteoporosis, if present</li> </ul>		
		<ul style="list-style-type: none"> <li>• Seek to preserve function at uninjured levels</li> </ul>		
8	<b>Collaborate in the rehabilitation plan</b> for the patient			
		<ul style="list-style-type: none"> <li>• Prevent and manage the consequences of neurological deficits</li> </ul>		
		<ul style="list-style-type: none"> <li>• Recognize the importance of preserving proximal cervical levels in the quadriplegic patient</li> </ul>		
		<ul style="list-style-type: none"> <li>• Implement a plan aimed at early mobilization</li> </ul>		
		<ul style="list-style-type: none"> <li>• Collaborate with rehabilitation physicians</li> </ul>		
		<ul style="list-style-type: none"> <li>• Recognize and address psychosocial issues</li> </ul>		
		<ul style="list-style-type: none"> <li>• Recognize and address work and family issues</li> </ul>		
9	<b>Identify and manage</b> postinjury and postoperative <b>complications</b>			
		<ul style="list-style-type: none"> <li>• Consider the potential risks of operative and nonoperative treatment</li> </ul>		

		<ul style="list-style-type: none"><li>• Recognize complications as early as possible</li></ul>		
		<ul style="list-style-type: none"><li>• Treat complications promptly</li></ul>		
		<ul style="list-style-type: none"><li>• Correct deformity</li></ul>		
		<ul style="list-style-type: none"><li>• Seek to preserve motion and spinal alignment</li></ul>		