

## CONCUSSIONS

A *Concussion* is defined as the immediate and transient impairment of neurologic function (a change in mental status or function). A concussion may be a consequence of an athlete's head striking an object (floor, another head, etc.), an object striking the athlete's head (ball, another head, bat/stick, etc.) or as a result of a sudden change of the direction of the head and neck (whiplash type injury). Regardless of the method of injury *concussions* generally produce similar clusters of *Signs* (things that can be observed by others) and *Symptoms* (things that are reported by the athlete). ***The grade or severity of a concussion is difficult to determine. You should not focus on the level of concussion but whether or not a concussion has occurred.*** The following charts should be used as guidelines for the coach to assess whether or not a concussion has occurred, what the appropriate course of action is at the time of injury and whether or not to allow the athlete to continue to play without physician clearance.

<b>Signs and Symptoms of a Concussion</b>	
<b>Signs (Observed by coach, parent, staff)</b>	<b>Symptoms (Reported by the Athlete)</b>
<ul style="list-style-type: none"> <li>• Appears to be dazed or stunned</li> <li>• Confused about assignment/tasks</li> <li>• Forgets plays; Unsure of game, score or opponent</li> <li>• Moves clumsily</li> <li>• Answers questions slowly</li> <li>• Loses consciousness (<u>even temporarily</u>)</li> <li>• Shows behavior or personality change</li> <li>• Retrograde Amnesia - Forgets events <u>prior</u> to hit or event that caused the concussion</li> <li>• Anterograde Amnesia - Forgets event <u>after</u> hit or event that caused the concussion</li> </ul>	<ul style="list-style-type: none"> <li>• Headache</li> <li>• Nausea and/or vomiting</li> <li>• Balance problems or dizziness</li> <li>• Double or blurry vision</li> <li>• Sensitive to light or noise</li> <li>• Feeling sluggish</li> <li>• Feeling "Foggy"</li> <li>• Change in sleep pattern</li> <li>• Concentration or memory problems</li> <li>• Altered emotional state for that athlete (anxiety, crying, being excessively angry, etc)</li> </ul>
<b>Symptoms may worsen with exertion. Athlete should not return to play until symptom free!</b>	

<b>On - Field Cognitive Testing - Complete in the order as follows:</b>		
<b>Orientation</b> - Ask the athlete the following questions. Answers should be quick and rapid.		
<ul style="list-style-type: none"> <li>• What stadium/field is this?</li> <li>• What city/town is this?</li> <li>• Who are we playing?</li> </ul>	<ul style="list-style-type: none"> <li>• What month is this?</li> <li>• What day is this?</li> </ul>	
<b>Anterograde Amnesia</b> - Ask the athlete to repeat the following words. These words may vary if you like.		
• Girl	• Dog	• Green
<b>Retrograde Amnesia</b> - Ask the athlete the following questions.		
<ul style="list-style-type: none"> <li>• What happened in the prior period, quarter or play?</li> <li>• What do you remember just prior to being hit/falling?</li> <li>• What was the score of the game prior to being hit/falling?</li> <li>• Do you remember being hit/falling?</li> </ul>		
<b>Concentration</b> - Ask the athlete to do the following.		
<ul style="list-style-type: none"> <li>• Repeat the days of the week backwards starting with today.</li> <li>• Repeat these numbers backwards: 63 (36 is correct) 419 (914 is correct)</li> </ul>		
<b>Word list memory</b>		
<ul style="list-style-type: none"> <li>• Ask the athlete to repeat the three words from earlier. Girl - Dog - Green</li> </ul>		
<b><u>Any</u> failure should be considered abnormal. Consult a physician following a suspected concussion.</b>		

*Material cited here is a result of work of the following group:  
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