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## Concussed High School Athletes Who Receive Neuropsychological Testing Sidelined Longer

*When computerized neuropsychological testing is used, high school athletes suffering from a sports-related concussion are less likely to be returned to play within one week of their injury, according to a study in The American Journal of Sports Medicine. Unfortunately, concussed football players are less likely to have computerized neuropsychological testing than those participating in other sports.*

A total of 544 concussions were recorded by the High School Reporting Information Online surveillance system during the 2008-2009 school year. Researchers looked at each of those instances to see what caused the injury, what sport was being played, what symptoms were experienced, what type of testing was used, and how soon the athletes returned to play. When looking at the causes and duration of concussions, the research found that:

- \* 76.2% of the concussions were caused by contact with another player, usually a head-to-head collision

- \* 93.4% of concussions caused a headache; 4.6% caused loss of consciousness

- \* 83.4% experienced resolution of their symptoms within a week, while 1.5% had symptoms that lasted longer than a month

Computerized neuropsychological testing was used in 25.7% of concussions, and in those cases, athletes were

less likely to return to play within one week, than those athletes for whom it was not used. Interestingly, however, researchers found that injured football players were less likely to be examined using the computerized neuropsychological testing than injured athletes participating in other sports.

“Although it is now recognized as one of ‘the cornerstones of concussion evaluation,’ routine neuropsychological testing in the setting of sports-related concussion is a relatively new concept,” write the authors, William P. Meehan III, MD, Pierre d’Hemecourt, MD, and R. Dawn Comstock, PhD. “This is the first study, of which we are aware, to query the use of computerized neuropsychological testing in high school athletes using a large, nationally representative sample.”

**Journal Reference:** W. P. Meehan, P. d’Hemecourt, R. D. Comstock. High School Concussions in the 2008-2009 Academic Year: Mechanism, Symptoms, and Management. *The American Journal of Sports Medicine*, 2010; 38 (12): 2405 DOI: 10.1177/0363546510376737