

Highlights from the 2008 Consensus Statement on Concussion in Sport

The NFHS Sports Medicine Advisory Committee (SMAC) regularly discusses and reviews the latest medical evidence regarding sports-related concussions in high school athletes. The past decade has witnessed significant changes in the management of sports-related concussions as new research findings have been published. Consequently, the NFHS SMAC has recently updated the "Concussion" section of the NFHS Sports Medicine Handbook (2008 Third Edition) and the 2009 NFHS brochure on "Suggested Guidelines for Management of Concussion in Sports."

In November of 2008, a panel of experts convened for the 3rd International Conference on Concussion in Sport in Zurich, Switzerland. The group has now published the Consensus Statement on Concussion in Sport. Previous consensus statements released in 2001 and 2004 have helped shape and define state of the art management of the concussed athlete during this decade.

After a thorough review of the newly released document, there are no substantial changes to report from the position the NFHS SMAC and the Centers for Disease Control and Prevention (CDC) articulated in 2005. However, the NFHS SMAC would like to emphasize three of their conclusions.

"A player with diagnosed concussion should not be allowed to return to play on the day of an injury."

While consistent with the recent recommendations of the NFHS SMAC, this statement represents a significant change from the previous statement released after the 2nd International Conference on Concussion in 2004. In the past, many medical experts stated that an athlete could return to play in an event if he or she no longer had any "symptoms" of a concussion 15 minutes after the time of the injury. The "15 minute rule" had come under increasing scrutiny by concussion experts as studies have found that most athletes are not fully recovered from a concussion within 48 hours of the injury, let alone 15 minutes. Therefore, over the past few years, the NFHS SMAC has maintained a policy of no same day return to play for high school athletes who have suffered a concussion.

"The cornerstone of concussion management is physical and cognitive rest until symptoms resolve and then a graded program of exertion prior to medical clearance and return to play."

Cognitive rest is a relatively recent concept which highlights the need for the concussed athlete to refrain from strenuous physical and mental activity while having concussion symptoms. Experts believe that allowing the brain to rest by limiting reading, studying and other forms of "mental exertion" will result in quicker recovery. Other activities to avoid include playing video games, text messaging, listening to loud music and using a computer. In some instances, individuals who have suffered a concussion may be told by their health care provider to take a few days off from school to allow symptoms to lessen.

Once all symptoms have resolved and the athlete has been cleared by a health care provider, the athlete may then begin a slow increase in physical activity over several days. If symptoms do not recur over this period of time, the athlete may then return to full activity. The NFHS SMAC and the CDC have advocated this approach to managing concussed athletes.

"There is no good clinical evidence that currently available protective equipment will prevent concussion."

The group of experts emphasized that there is currently no good evidence to support the notions that certain football helmets will eliminate the risk of concussion, or that soccer headgear or mouthguards will do so. Of course, well maintained and properly fitted equipment are always appropriate to reduce risk.

For further information regarding concussion in sports, please see:

McCrory P, Meeuwisse W, Johnston K, Dvorak J, Aubry M, Molloy M and Cantu R. Consensus Statement on Concussion in Sport: The 3rd International Conference on Concussion in Sport held in Zurich, November 2008.

NFHS. Suggested Guidelines for Management of Concussion in Sports. Brochure from the NFHS Sports Medicine Advisory Committee. 2009.

NFHS. Concussions. 2008 NFHS Sports Medicine Handbook (Third Edition). 2008: 77-82.

Applicable NFHS Sports Medicine Advisory Committee Position Statements, Guidelines and Recommendations on the NFHS web site under Sports Medicine at http://www.nfhs.org.