## **Concussions and School Performance**

## These recommendations come directly from the Wisconsin Interscholastic Athletic Association (WIAA):

A major concern with a concussion is that it can interfere with school performance. The signs and symptoms of poor short- and long-term memory, concentration and organization may temporarily turn a good student into a poor student. The best way to address this is to decrease the academic workload by potentially taking time off from school or going partial days. Injured athletes should have extra time to complete homework and tests, and they should be given written instructions for homework. New information should be presented slowly and repeated. Injured athletes will need additional time to catch up and may benefit from tutoring. Prorating homework and eliminating any non-essential assignments can be helpful. If an athlete develops worsening symptoms at school, he/she should be allowed to visit the school nurse. Classes like PE and Tech Ed (Shop) should be avoided. If the injured student is sensitive to noise, he/she should be excused from choir, band and the loud lunchroom (allow to eat in a quiet area). It may be helpful to avoid computerbased classes. The best use of the student's time is not to observe others in the aforementioned classes, but to use that time to rest in a quiet area or receive tutoring to help catch up. The school and coaches should maintain regular contact with the injured athlete's parents to update progress. Athletes with a concussion should return to full speed academics without accommodations before returning to sports.

Rest from physical exertion is an essential component of concussion treatment. Further contact is to be avoided at all costs due to risk of repeat concussion and Second Impact Syndrome. Physical exertion can also worsen symptoms and prolong concussion recovery- this includes aerobic conditioning and resistance training. Only an appropriate health care provider can clear an injured athlete to resume physical activity.

It is also important to remember that the athlete's concussion can interfere with work and social events (movies, dances, attending games, etc.). Injured athletes need to practice good sleep habits and sleep well at night in order to recover. Brief "power" naps during the day may be helpful as well. Athletes should decrease brain stimulation at home by limiting video games, computer time, text messaging, and TV/movies.

Neuropsychological testing can be a helpful component of concussion management, as it can provide insight into brain function. Computerized testing is best used as a tool in concussion management, but can help ensure safe return to activity. Testing is currently done using computerized neuropsychological testing (example: ImPACT, Axon Sports) or through a more detailed written test administered by a neuropsychologist. For proper concussion management, neuropsychological evaluation should not "stand alone" and must be combined with the medical evaluation of concussion.

If neuropsychological testing is available, ideally a baseline or pre-injury test is obtained prior to the season. This baseline should be done in a quiet environment when the athlete is well rested. It is felt that baseline testing should be repeated every one to two years for the developing adolescent brain. If there is no baseline available, an experienced health care provider may compare the injured athlete's scores to age established norms. The WIAA feels that neuropsychological testing can be a very useful tool with regard to concussion management.