

Show-Me Health

Topic: Sports Concussions

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The start of the school year is just around the corner. With that comes the excitement of the fall sports season and the lights of Friday night football. For the many Hornets in Chillicothe who competed on high school teams last year, it can also bring worries about sports-related concussions.

Between 140,000 and 150,000 cases of concussion occur among high school athletes in the United States each year, said Dr. Thomas Martin, professor of health psychology at the University of Missouri and former president of the Brain Injury Association of Missouri. Center for Disease Control and Prevention (CDC) data backs this up, estimating that U.S. emergency departments annually treat an estimated 135,000 sports- and recreation-related traumatic brain injuries (TBI), including concussions, among children ages 5 to 18.

Sports-related concussions can cause lasting brain injuries if not allowed to heal properly, according to the CDC. TBI can also cause epilepsy and increase the risk for conditions such as Alzheimer's disease, Parkinson's disease, and other brain disorders that become more prevalent with age.

Although football is most often linked to sports-related concussions, TBI can occur with boys or girls in any sport or recreational activity. Any blow to the head, face, neck or other place on the body that causes a quick jarring of the head can cause a concussion.

"A concussion is any direct blow to the head that causes a change in a person's normal mental status," said Dr. John Montgomery, Interim Chair of Emergency Medicine at University Hospital in Columbia. In his 30 years of experience in emergency room medicine, Montgomery has seen an increase in cases of suspected concussions during football season.

Some football teams are starting to use new concussion-reducing helmets, but Dr. Mark Halstead of the Washington University Sports Medicine Clinic in St. Louis said the new headgear is unproven in actual play at this point. The helmets have been shown to prevent cuts, scrapes and bruises, but have not yet been widely used enough to prove that they reduce risks of concussion.

Education and raising awareness is key in preventing harmful effects from concussion, said Halstead, who has done extensive educational outreach with high schools in Missouri. Reporting of possible concussions has increased as a result of his campaign. "Athletes are truly taking it to heart," Halstead said.

In an effort to reduce the number of concussions in sports, Missouri Governor Jay Nixon signed a bill this July that requires all athletes who have suffered a concussion to refrain from any athletic-related activity for at least 24 hours. After the 24 hour rest period, athletes may only return once they are cleared by a licensed doctor.

The safest way to play sports with physical contact like football is proper tackling technique. “Don’t lead with the head when tackling. Use the upper torso and keep the head up. This will ensure that there is no damage to the spine,” Montgomery said. Many concussions also occur because players do not have their helmets properly adjusted. “The main thing is to make sure the equipment fits,” said Montgomery.

In addition to wearing the proper equipment and using correct techniques, the CDC and Health Literacy Missouri (HLM) suggest looking for the following concussion symptoms and seek medical attention if noticed:

- Issues with thinking or remembering. These symptoms can include difficulty thinking clearly, concentrating and remembering new information.
- Physical problems. This can include headaches, fuzzy or blurred vision, nausea or vomiting (soon after the injury), dizziness, sensitivity to noise or light, balance problems and feeling tired or having no energy.
- Emotional or mood irregularity. These symptoms include irritability, sadness, being more emotional than normal, and nervousness or anxiety.
- Difficulties sleeping. Sleeping more or less than usual or having trouble falling asleep can be signs of a concussion.

For more information, visit the CDC website about sports-related concussions at: <http://www.cdc.gov/concussion/sports/index.html>. The CDC also offers free materials that can be ordered from its “Heads Up” series about youth and teen concussions.

ABOUT HEALTH LITERACY MISSOURI: Health Literacy Missouri (www.healthliteracymissouri.org) defines health literacy as “getting and using easy to understand information about your health.” Health Literacy Missouri is a non-profit corporation based in St. Louis and serving the entire state of Missouri. Its goal is to improve the health of all Missourians while becoming a national leader in health literacy.

All services of the health center are offered on a non-discriminatory basis.