



## NEWS RELEASE

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# Arizona Expands Concussion Education and Prevention to Youth Athletes

*Despite Recent National Studies, Barrow Seeing More Concussion Reporting Among Athletes*

**On the eve of start of Arizona's high school football season, one of the nation's leading experts on concussions says young athletes in Arizona are increasingly seeking proper medical treatment for brain injuries, but underreporting of concussions nationally remains a problem.**

Javier Cárdenas, MD, neurologist and brain injury expert at Barrow Neurological Institute at St. Joseph's Hospital and Medical Center, said during a news conference Tuesday that recent mandatory education to help prevent concussions is making a difference. "Two years ago we introduced a mandatory education program through the Arizona Interscholastic Association called Barrow Brainbook," says Cárdenas. "So far more than 180,000 Arizona high school athletes have completed the education." Cárdenas said that while exact data on concussion is still being collected, his clinic at Barrow has seen patient volume double in the last two years.

**With the kick-off to this year's high school football season, Barrow, the Arizona Interscholastic Association (AIA), and the Arizona Cardinals also announced Tuesday the launch of a special concussion prevention video game for very young athletes and highlighted a new AIA regulation for football practice – both aimed at preventing head injuries in young athletes. Both initiatives are expected to continue Arizona's lead in concussion awareness and reach young athletes across the nation.**

The video game, called Barrow Brain Ball, is the first video game of its kind that teaches children how to safely avoid collisions with other players. The interactive game is geared toward children ages 8 to 12, and was funded through a grant by the Fiesta Bowl. The video game is free and will soon be available for download on all Android and iPhones.

"We have developed concussion education for high school students, but until now there's been minimal education available to youth athletes," says Dr. Cárdenas. "Barrow Brain Ball is an innovative way for us to start teaching children throughout the U.S. about concussion early in age. We want them to learn how to play safe when they're young."

The AIA also announced a new regulation that will limit contact during football practice. **The rule specifies that no more than half of football practice can be contact practice in the pre-season and no more than one-third of practice time be contact practice during the regular season.** The recommendation was made by the AIA Sports Medicine Advisory Committee to further reduce concussions and other brain injuries. The AIA is the first state high school association in the nation to announce regulations that will limit contact during football practice. It's hoped that the National Federation of High School Associations will adopt this new regulation and implement it in schools across the country.

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In 2012, a study of 20 high school sports reported that concussions accounted for 13.2 percent of all injuries and one-third of those occurred during practice. A more recent study in youth sports showed that injuries did not increase in games when contact was limited during practice.

“With so much information coming to light from the medical community, the AIA Sports Medicine Advisory felt our policies should extend beyond officiated games in dealing with concussion prevention,” says Chuck Schmidt, associate executive director for the AIA. “We’re hopeful that this new regulation will further decrease concussion in our young student athletes.”

These new developments come after a recent national study that suggests underreporting of concussion by high school athletes remains a large issue nationwide. Despite this national study, experts at Barrow have seen patient volume associated with concussion rise, suggesting that Arizona’s revolutionary concussion education guidelines are increasing concussion awareness and recognition.

“We are seeing an increase at Barrow in the number of individuals who are no longer ignoring concussion symptoms and are instead reporting them and receiving proper treatment,” says Dr. Cárdenas. “Although underreporting of concussion remains a national issue, we believe we’re seeing a shift in Arizona due in part to the large efforts the state has made in concussion awareness.”

Just two years ago, Arizona became the first in the United States to mandate all male and female AIA high school athletes undergo concussion education and pass a formal test before play through Barrow Brainbook. In addition, the development of the Barrow Concussion Network is working to provide medical resources to AIA athletic trainers, provide pre-injury testing and post-injury treatment to athletes, and conduct research on injured Arizona students.

“Recognizing the high priority placed on safety in all sports, the Arizona Cardinals are proud to work alongside Barrow and the AIA to help protect young athletes,” says Michael Bidwill, President of the Arizona Cardinals. “These are important and valuable initiatives and we hope that other states will adopt the same standards that Arizona has created.”

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