

Concussions not just a concern for pro athletes

By Kathryn Reed

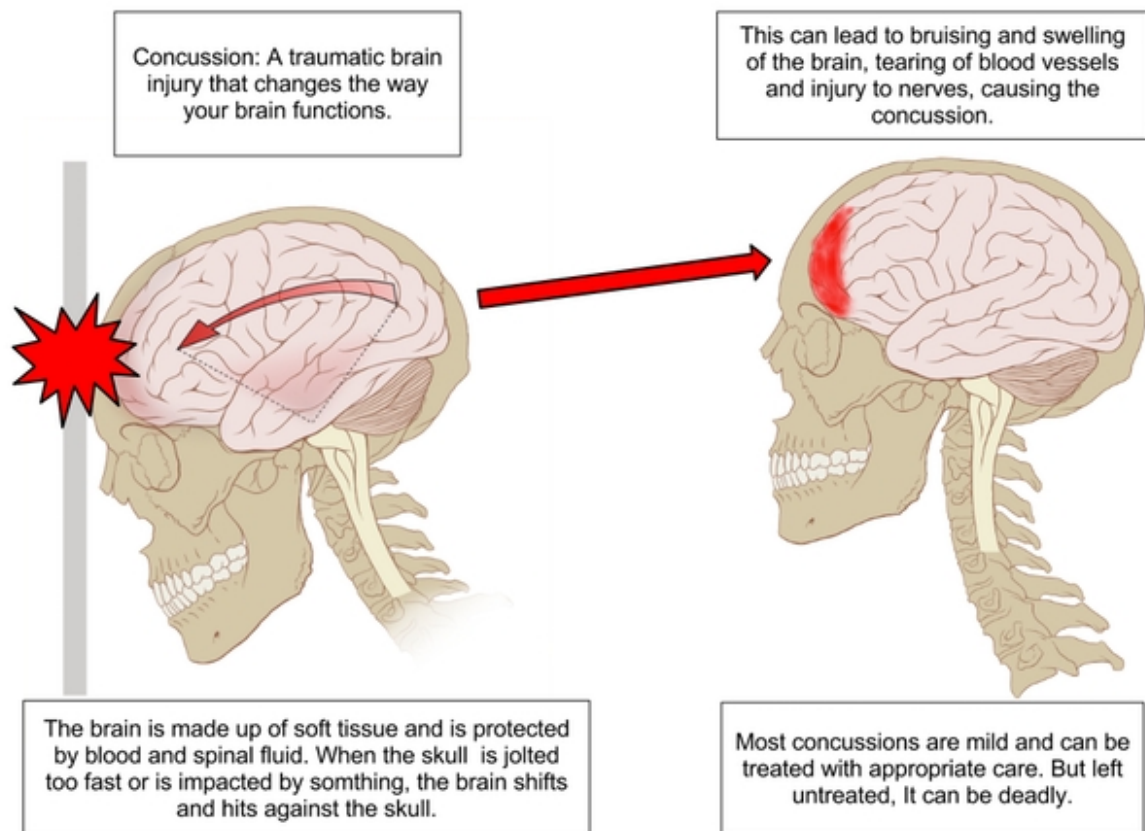
It's not just professional sports teams paying more attention to athletes with concussions. It's a big deal in the Tahoe-Truckee area, too.

One of the problems is there is no diagnostic tool for medical professionals to use to test if someone sustained a concussion or if they have fully recovered.

That is why South Shore athletes are being given a cognitive impact test prior to competing in order to get a baseline. Then medical experts can use that data to compare it to information ascertained after an injury has occurred.

"It shows how their brain is functioning at that moment," Chris Proctor, director of the Tahoe Center for Orthopedics, told *Lake Tahoe News*. "It's a computer test. It tests reactions, memory and goes through key factors."

Barton tests athletes at South Tahoe, Whittell and Douglas high schools.



Source: *Concussion mechanics.svg*

Football remains the sport with the most number of concussions for athletes Barton Health practitioners see. In winter, concussions are mostly from skiing and snowboarding. Throughout the United States it is women's soccer and field hockey players who receive the most concussions.

Proctor doesn't believe there are more concussions, but instead there is better awareness of the condition.

"We have the idea if a kid hits his head, we assume it is a concussion until we prove it's not," Proctor said.

He said a handful of years ago parents would shop around to get a medical clearance for their son or daughter. Knowledge of the potential lingering effects of concussions as well as Second Impact Syndrome (SIS) has parents putting their children's health before their athletic careers. It was SIS that killed South Lake Tahoe resident Ryan Shreve. Ryan Shreve Head Injury Awareness Foundation was created in the 1997 South

Tahoe High School graduate's name in hopes of limiting the number of deaths like his.

Pop Warner in Marin County is part of a three-year pilot program that has sensors on kids' helmets that alerts adults the player may have sustained a concussion.

The fear of concussions is being attributed to a 10 percent drop in Pop Warner participation nationwide between 2010 and 2012, according to ESPN.

Because there is no neurologist on staff at Barton Memorial Hospital, the orthopedists are handling concussions. With the hospital recently becoming a trauma center, the emergency room and orthopedic specialists are working together more closely so all concussion patients – athletes or others – are receiving the same care.

At the Institute for Rural Health Research, a subsidiary of Tahoe Forest Hospital, scientists are trying to develop a device to diagnose concussions. In 2014, the Gene Upshaw Memorial Fund donated \$180,557 to this cause. The memorial fund has donated a total of \$323,544 specifically for traumatic brain injury research at the Truckee facility.

(Upshaw was a National Football League hall of famer and former NFL Players Association executive director who died of pancreatic cancer in 2008 at Tahoe Forest Hospital. Upshaw's wife, Terri, and sons Justin and Daniel established the fund because of the care he received at the hospital.)

Researchers there have been working for a few years to create a low cost, compact, portable unit that will be able to determine injury severity within 10 minutes.