

## **Eye on Education: Concussion Testing for Athletes**

Originally broadcast December 1, 2004

GreaterBoston.com

Brookline High School just wrapped up its football season and not without incident. About ten players suffered concussions. With varying grades of damage, concussions don't always cause a person to black out. Simply put, they are a mild injury to the brain.

There is "not actually any visible damage to the brain that you would see on brain scanning," says Brookline parent and neuropsychologist Dr. Neil McGrath. "We assume instead that there's some sort of metabolic change that's taking place." One that's only temporary unless players jump back in the game before they are fully recovered.

The greatest risk posed to student athletes is second impact syndrome. With successive concussions, "there is definitely the possibility that symptoms may extend longer or that students may have subtle declines in their cognitive ability," says Dr. McGrath. Wary of putting student athletes at risk, Brookline High has implemented a concussion testing and awareness program.

"We just want to make sure we're as cautious as possible, but also just be reasonable," says Brookline High Athletic Director Peter Rittenburg. In the program, all athletes undergo a computerized baseline test which surveys both their concussion symptoms and cognitive ability.

Students are tested on factors like memory reaction time, processing time and impulse control. Should an athlete suffer a concussion, the student is then retested and the results are compared to the baseline exam. "Their reaction time may be slower, their memory may not be as efficient," says Dr. McGrath.

Through awareness, Brookline is trying to change the culture on the field too. Brookline football coach Malcolm Cawthorne says "kids are getting bigger, stronger, faster so the game has gotten a little more violent." Not to mention more competitive, perhaps making athletes less apt to pull themselves out of a game with a suspected concussion injury. But Cawthorne has found that injured athletes also don't want to be the ones to lose the game because they allowed themselves to play injured. And no athlete, game or otherwise, wants to end up in the loss column.

**See video ([56k](#)) ([Broadband](#))**