



# Neurosurgery

More Than Just Brain Surgery

## ThinkFirst About Concussion

9.13.16 | 2:45 pm



Debby Gerhardstein, RN, BSN, MA (left)

Executive Director

[ThinkFirst National Injury Prevention Foundation](#)

Naperville, Illinois

Mark A. Spatola, MD, FAANS (right)

Chairman, ThinkFirst Board of Directors

[Orange Park Neurosurgery](#)

Orange Park, Florida

Over the years, the topic of concussion has moved from behind the shadows of mild traumatic brain injury (TBI) to take on a life of its own. As athletes with multiple concussions and repetitive injuries demonstrated more debilitating brain injuries, the added seriousness of concussions became apparent. Widespread and appropriate education is a cornerstone of concussion prevention and proper intervention.



The [ThinkFirst National Injury Prevention](#)

[Foundation](#), founded by the AANS and CNS, has provided educational programs on brain injury prevention since the organization began 30 years ago. ThinkFirst chapter health educators — nurses, physicians, physical and occupational therapists and other skilled presenters — use models of life-like brains during their school presentations to demonstrate the delicate nature of the brain as they shake the surrounding skull model. VIP speakers — [Voices for Injury Prevention](#) — who have experienced a TBI share their experience. Students learn the limits of recovery and the importance of prevention and treatment. Concussion has always been mentioned as a mild TBI, but previously most attention was given to the potential for severe injuries.

Given the spotlight on concussions, ThinkFirst has been leading the way. Importantly, the Foundation was a participant at the Jan. 14, 2011, National Forum on Youth Sport Concussion: Taking Action State by State. The forum — organized by the [American College of Sports Medicine](#) and the [National Football League](#) (NFL) — was held at the [Children's National Health System](#) in Washington, D.C. Leadership from nearly 50 organizations attended, participating in discussions led by the [Centers for Disease Control and Prevention](#) (CDC) and key leaders in the field. The [Zachery Lystedt Law](#) had just passed in the state of Washington. This new law — which eventually would be adopted by all 50 states — prohibited returning a youth athlete suspected of sustaining a concussion to practice or a game without a licensed health care provider's written approval. ThinkFirst asked, what could we do to provide concussion education for coaches, parents and youth athletes? What resources did we have, or could we develop, to support these state concussion laws?

# ThinkFirst!

---

## About Concussion

Subsequently, we invited two physicians instrumental in developing Arizona's answer to this question to join ThinkFirst's Board of Directors. [Nicholas Theodore](#), MD, FAANS, a ThinkFirst sponsoring physician, and [Javier Cardenas](#), MD — both of

the [Barrow Neurological Institute](#) in Phoenix at the time — had worked to create the [Barrow Brainbook](#). The Brainbook, an online concussion recognition and prevention program, was adopted by the state of Arizona for student-athletes to complete prior to entering school sports. Drs. Theodore and Cardenas served as medical advisors to the ThinkFirst concussion committee in creating a live concussion presentation to compliment online programs.

Upon researching available concussion programs, the committee found few provided live presentations to student audiences.

Out of the few existing programs most focused on educating coaches, so the coaches could, in turn, teach their student-athletes. It was evident to the committee that a program modeling ThinkFirst's live classroom education could have a considerable impact. Important aspects of the program would include:

- Teaching students about the brain and its limitations;
- Providing prevention tips; and
- Introducing someone who had been injured.

ThinkFirst already had an established network that would provide these programs with skilled health educators, physicians and VIP speakers involved in chapters across the United States.

Launched in August 2014, ThinkFirst About Concussion created a [presentation](#) that covers many aspects of concussion, including:

- Anatomy of the brain;
- How concussions occur;
- How the brain is affected when various parts are injured;
- What is needed for healing;
- Signs and symptoms of a concussion, and
- What actions to take, should a concussion be suspected.

Second impact syndrome is also discussed, as is the need for leaving play, seeking medical attention and not returning to play without clearance from their physician. Information is primarily based on the [CDC Heads Up](#) program that has been a standard in online concussion education information, as well as the Barrow Brainbook.

A five-minute video, [Meghan's Story](#), was developed with the help of the [TriHealth ThinkFirst](#) Chapter of Cincinnati, Ohio, and editor Brian C. May. Program participants hear from Meghan, who had to abandon

her dreams of being an Olympic gymnast because of multiple concussions that went untreated. Chapters also contract with VIP speakers, who have experienced a concussion or a more severe brain injury, to speak at their programs.

In the first two years, chapters have provided nearly 600 ThinkFirst About Concussion presentations reaching close to 50,000 students! Chapters are encouraged to present the program in health classes and assemblies for all students, not just to athletes, as all people need to be prepared for a concussion that could result from any circumstance. Given this early success and positive reception, use is expected to increase as more ThinkFirst physicians and chapter directors begin using the program.

For more information, visit [www.thinkfirst.org](http://www.thinkfirst.org) or contact ThinkFirst at [thinkfirst@thinkfirst.org](mailto:thinkfirst@thinkfirst.org).



© 2016 Neurosurgery Blog: More Than Brain Surgery. All rights reserved.

[Privacy Policy](#) [Terms of Use](#)

*This blog is a product of The American Association of Neurological Surgeons (AANS) and the Congress of Neurological Surgeons (CNS). The material on this site is for informational purposes only, and is not a substitute for medical advice and is not intended to replace consultation with a qualified neurosurgical professional.*