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September 15, 2009

The Honorable Jeffrey Sanchez, House Chair The Honorable Susan C. Fargo, Senate Chair Joint Committee on Public Health State House, Room A-1 Boston, MA 02133

Dear Representative Sanchez and Senator Fargo:

I write today to ask the committee for swift and favorable action on Senate Bill 796, Senator Steven Baddour's Legislation Relating to Safety Regulations for School Athletic Programs.

My name is Chris Nowinski, and am a Co-Director of the Center for the Study of Traumatic Encephalopathy at Boston University School of Medicine, and CEO of the Sports Legacy Institute, a non-profit dedicated to solving the sports concussion crisis, as well as the author of *Head Games: Football's Concussion Crisis*. My passion for this work is both personal and professional. My promising professional wrestling career with World Wrestling Entertainment was ended by undiagnosed and improperly treated concussions I suffered with WWE and as a collegiate football player at Harvard University.

In personal research undertaken to better understand why I was suffering from five years of headaches, memory impairment, depression, and insomnia, I learned that concussions are far more damaging than we realize in the sports community.

I also learned that educating coaches of youth athletes would be the easiest and simplest way to prevent brain damage and ensure the future of scholar-athletes.

Two key pieces of information - well known in the medical community - are virtually unknown in the sports community.

- 1. Concussions create a 'window of vulnerability' where injured brain cells need to recover.
 - o If they are allowed to recover, the injury may cause no long-term damage.
 - If they are not allowed to recover, usually due to not diagnosing the concussion or returning too soon after a concussion, research indicates longterm damage is more likely.
 - High school athletes die each year from Second-Impact Syndrome, caused by returning too soon after a concussion. In 2009, 8 athletes suffered SIS, with some dying and none with a complete neurological recovery.

- 2. Multiple concussions increase an athlete's risk of the neurodegenerative disease Chronic Traumatic Encephalopathy (CTE), which can include symptoms that mimic Alzheimer's and tend to include depression and emotional instability.
 - o In January of 2009, our center at BU found the beginnings of CTE in an 18 year-old, indicating that this disease likely begins in youth in most cases, as trauma is much more damaging to the developing brain versus the adult brain.

When we combine that information with data that indicates 90% of concussions go undiagnosed and a recent study indicating 42% of athletes with a diagnosed concussion are returned too soon by coaches, it is clear that we as a society are doing virtually nothing to combat a disease that is clearly destroying the lives of once healthy people.

As a 30 year-old adult, I am now appalled that we encourage children to participate in sports that will create regular high velocity impacts to the head, and yet we don't take even the simplest steps to protect them.

The first and most important step is educating the adults on the field at practices and games. With subsequence increased diagnosis rates as well as better managed return-to-play, we can be confident that sports will continue to be a positive part of growing up, rather than a legitimate risk to a young person's future.

For this reason I respectfully ask that the Committee give its approval to Senate Bill 796, so that it may be considered expeditiously by the full Legislature.

Regards,

Chris Nowinski

Co-Director, Center for the Study of Traumatic Encephalopathy Boston University School of Medicine President, Sports Legacy Institute

Author: Head Games: Football's Concussion Crisis