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Falmouth, MA 02540  
Phone: 508-540-1801 Fax: 508-5540-6595

Support  
S. 796

The Hon. Jeffrey Sanchez, House Chair  
The Hon. Susan C. Fargo, Senate Chair  
Joint Committee on Public Health  
State House  
Boston, MA 02133

RE: S 796 AN ACT RELATING TO SAFETY REGULATIONS FOR SCHOOL ATHLETIC PROGRAMS.

August 17, 2009

Dear Representative Sanchez and Senator Fargo,

On behalf of the Massachusetts Chapter of the American Academy of Pediatrics, I would like to strongly support Bill # S 796, the sports concussion bill.

I speak to this particular issue not only as a pediatrician and injury prevention advocate, but also as a youth hockey coach and parent. My experience reinforces what all of who watch youth sports know, that injuries occur frequently, that head injuries are all too common, and most importantly in this context, that the assessment of "readiness to return to play" must be made carefully, in collaboration with health care providers, athletic trainers, and coaches.

In the past, there has been a lack of understanding of the potential long-term effects of repeated minor head trauma. However, it is now known that repeated concussions can lead to permanent memory loss, fatigue, impaired concentration and mood problems. It is also known that the brain is most susceptible to injury in the days and weeks immediately following a previous injury. *Too many players return to play too soon* is the take home message.

Most high school coaches are former athletes; on average, it is 25 years after their playing days. Without updated teaching, they will rely on their own experience, from an era when players just "shook it off" and went back in the game. Unfortunately, we have seen the consequences to a generation who competed in this fashion.

However, coaches care about their student-athletes, and want them to help them to be healthy and successful adults. They have genuine concern for their readiness to play, and usually are very receptive to instruction.

Thanks to the Center for Disease Control, a standardized teaching tool is available to help our schools and student athletes. The use of this tool to teach coaches and athletic trainers will help to increase knowledge, to standardize return to play, and to protect our student athletes.

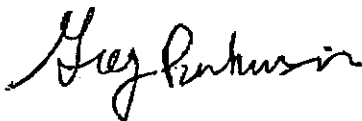
I hope that you will support this measure, and favorably act upon it.

Gregory W. Parkinson, M.D.

Peter T. Lind, M.D.

Falmouth Pediatric Associates, LLP  
2 Bramblebush Park  
Falmouth, MA 02540  
Phone: 508-540-1801 Fax: 508-5540-6595

Sincerely,



Greg Parkinson, MD FAAP  
Chair, Injury Prevention, Mass Chapter of American Academy of Pediatrics  
Chair, Mass Coalition for Adolescent Road Safety  
Co-chair, Belts Ensure a Safer Tomorrow (BEST)

Gregory W. Parkinson, M.D.

Peter T. Lind, M.D.



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Waltham, MA 02451  
www.sportslegacy.org

Christopher Nowinski, President  
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S. 796  
Favorable

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.
  - 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 long-term 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 subsequent 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*

S. 796 Favorable

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.

Over the course of my college and professional football career I suffered numerous mild concussions as well as one very serious one, where I was unconscious and hospitalized. Over the years the head injuries I received have taken their toll to the degree of causing life long consequences to myself but more importantly my family. I firmly believe that if this law was in place when I was playing sports, I would not be facing these challenges today and would have potentially lengthened my football career as it was cut short due to the mistreatment and neglect of my personal injuries. Due to the nature of sports and competition, athletes will always push themselves past any injury possible to participate. Head injuries are the most dangerous an athlete can suffer, as the brain cannot make proper decisions under it's compromised state.

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

Kindest Regards,

Kyle Turley

San Diego State University  
New Orleans Saints '98-02'  
St. Louis Rams '03-04'  
Kansas City Chiefs '06-07'

Support  
S. 796

September 15<sup>th</sup>, 2009

The Hon. Jeffrey Sanchez, House Chair

The Hon. Susan C. Fargo, Senate Chair

Dear Representative Sanchez and Senator Fargo:

As the Injury Prevention Coordinator of Boston Medical Center, I write today to support Senate Bill 796.

Working together with The Massachusetts Prevent Injuries Now! Network, Boston Medical Center joined the efforts to begin aggressive promotion of the CDC's "heads up" youth sports concussion prevention materials over the past year.

To date, BMC has successfully distributed over 200 kits through our awareness program to school coaches and parents of children playing sports throughout Massachusetts.

The CDC recently updated their estimate of sports and recreation concussion in the United States from 300,000 to between 1.6 and 3.8 million. The jump represents the new understanding that concussions are rarely reported to medical professionals due to a lack of understanding regarding the significance of a mild traumatic brain injury. For those that are diagnosed, MDPH's Injury Surveillance data indicates that sports and recreation-related traumatic brain injuries result in nearly 1,400 emergency department visits each year among high school age youth (ages 15-18). Another 1,305 children aged 9-14 are taken to emergency rooms with sports or recreation-related TBIs. In addition, another 99 children between the ages of 9 and 18 suffered brain injuries severe enough to require hospitalization.

Recent consensus statements state that proper concussion diagnosis and management is key to preventing negative outcomes. Return to play during the 'window of vulnerability' after a concussion - where a secondary injury can exacerbate the first - often prevents student-athletes from achieving in school and can cause sudden death from second-impact syndrome.

There is also a growing appreciation, spearheaded by a new research center at Boston University School of Medicine, a partner of Boston Medical Center, that repetitive brain trauma in sports can result in a devastating Alzheimer's-like neurodegenerative disease called Chronic Traumatic Encephalopathy, also known as "punch drunk syndrome." Previously only well-studied in boxers, the disease has recently been identified in football and hockey players, one as young as 18 years-old.

It is of utmost importance, for the future safety of our state's children, that we continue our campaign to get the CDC's "heads up" youth sports concussion prevention materials out to every Emergency Room director, trauma prevention director, youth coach and school nurse in our Commonwealth.

Senate bill, 796 will support this as well as the development of an active training mechanism through which youth coaches and others involved in the care of athletes would be required to prove competence in understanding proper diagnosis and management of concussion.

We see, first hand, sports concussion related injuries at Boston Medical Center and the need for education around proper concussion diagnosis and management for student athletes in their schools. We write to strongly support Senate Bill 796.

Sincerely,  
Lisa Allee

Lisa C. Allee, MSW, LICSW  
Injury Prevention Coordinator  
Boston Medical Center  
617-414-8007



MASSACHUSETTS  
GENERAL HOSPITAL



MassGeneral Hospital  
for Children™

S. 796  
SUPPOA



HARVARD  
MEDICAL SCHOOL

Pediatric Surgery  
55 Fruit Street, Warren 11  
Boston Massachusetts 02114

September 15, 2009

To The Hon. Jeffrey Sanchez, House Chair, and the Hon. Susan C. Fargo, Senate Chair  
Joint Committee on Public Health

Re: Senate Bill 796 "An act relating to safety regulations for school athletic programs"

My name is Caren Harris and I am a Pediatric Nurse Practitioner specializing in Pediatric Trauma. I work at Massachusetts General Hospital for Children, treating children and adolescents who have sustained traumatic injuries. I work in the inpatient hospital setting as well as in the Pediatric Trauma Clinic.

Thank you for this opportunity to testify before the Joint committee on Public Health regarding Senate Bill 796, an act relating to safety regulation for school athletic programs.

This is an important topic pertaining to school athletes. Athletics present our young citizens with an opportunity for physical fitness, teach them about the spirit of competition, and provide them avenues for social connectedness. With sports participation, however, there comes a risk for injury. Injuries to the musculoskeletal system are usually obvious and generally straightforward in terms of recognition and rehabilitation. Injuries to the brain, however, can be a much more difficult issue.

The science of concussion is evolving and still there is much to be learned. What we do know is that concussions vary in intensity and duration. The adolescent athlete tends to take longer to recovery than their adult or college counterparts. Also, the negative effects from a concussion are measurable for some time after the symptoms that the athlete feels have subsided.

Coaches, trainers, athletes, and parents are all put in a position to make decisions when athletes are injured. A programmed educational system, as outlined in this bill, would help to educate all of those involved in school athletics to help prevent, recognize, and properly treat the athlete with a head injury.

I have seen in the Pediatric Trauma Clinic that often there is pressure felt by the athlete to return to competition as soon as possible after an injury. Signs of a concussion may be overt or subtle and the evaluation by a health care provider would help to tease out ongoing effects from the



A Teaching Affiliate  
of Harvard Medical School



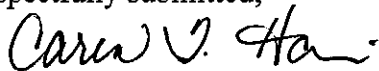
head injury. An evaluation by a health care provider is essential prior to return to play after sustaining a concussion. As concussions vary in severity and effect, so too do the recommendations for care after a concussion. The physician, nurse practitioner, or physician's assistant is in a uniquely neutral position regarding the return to play for these athletes. They can provide a thorough neurological evaluation and can provide guidance geared to the individual athlete.

Several years ago when I worked in primary care, I worked with a young athlete who had sustained a concussion diving for a ball while playing volleyball. She hit her chin on the floor and had dizziness, headache, and impairing fatigue that lasted for several weeks. She attempted to return to school without success within a couple of days of her injury. She could not follow what was happening in class and felt quite scared and confused as prior to her injury she had been an outstanding scholar athlete. She did not seek healthcare until two weeks after her injury. Had she been educated about head injuries as this bill recommends and evaluated sooner, she would have been pulled from school as well as athletics and been provided the appropriate support and recommendations. Perhaps, too, her symptoms would have abated sooner.

I am here to testify in support of this bill and on behalf of the young athletes of the Commonwealth. I would urge the members of this committee to support Bill SB792 and recommend its passage by the legislature.

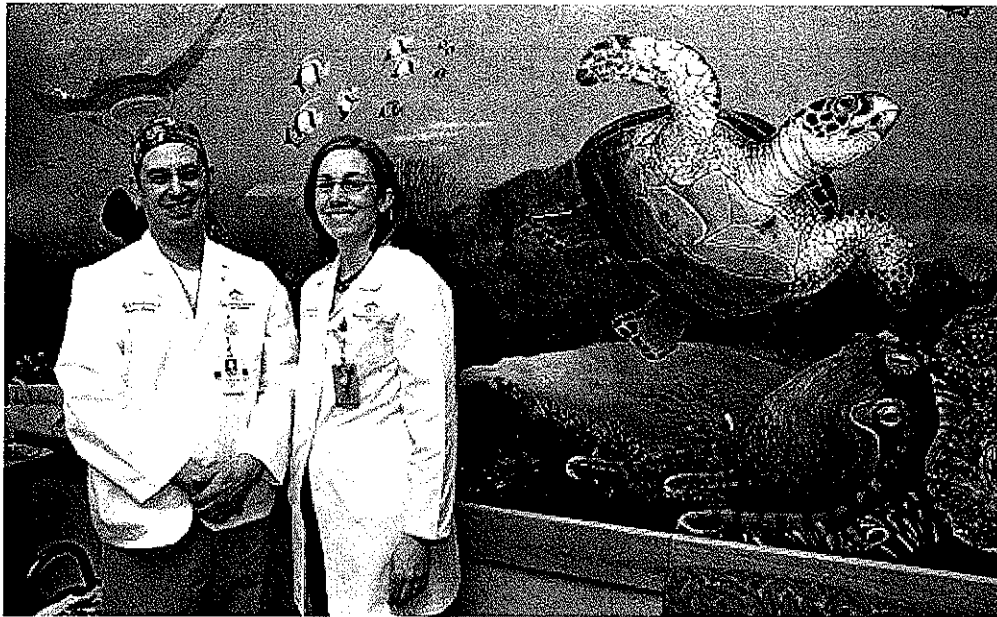
Thank you for your time.

Respectfully submitted,

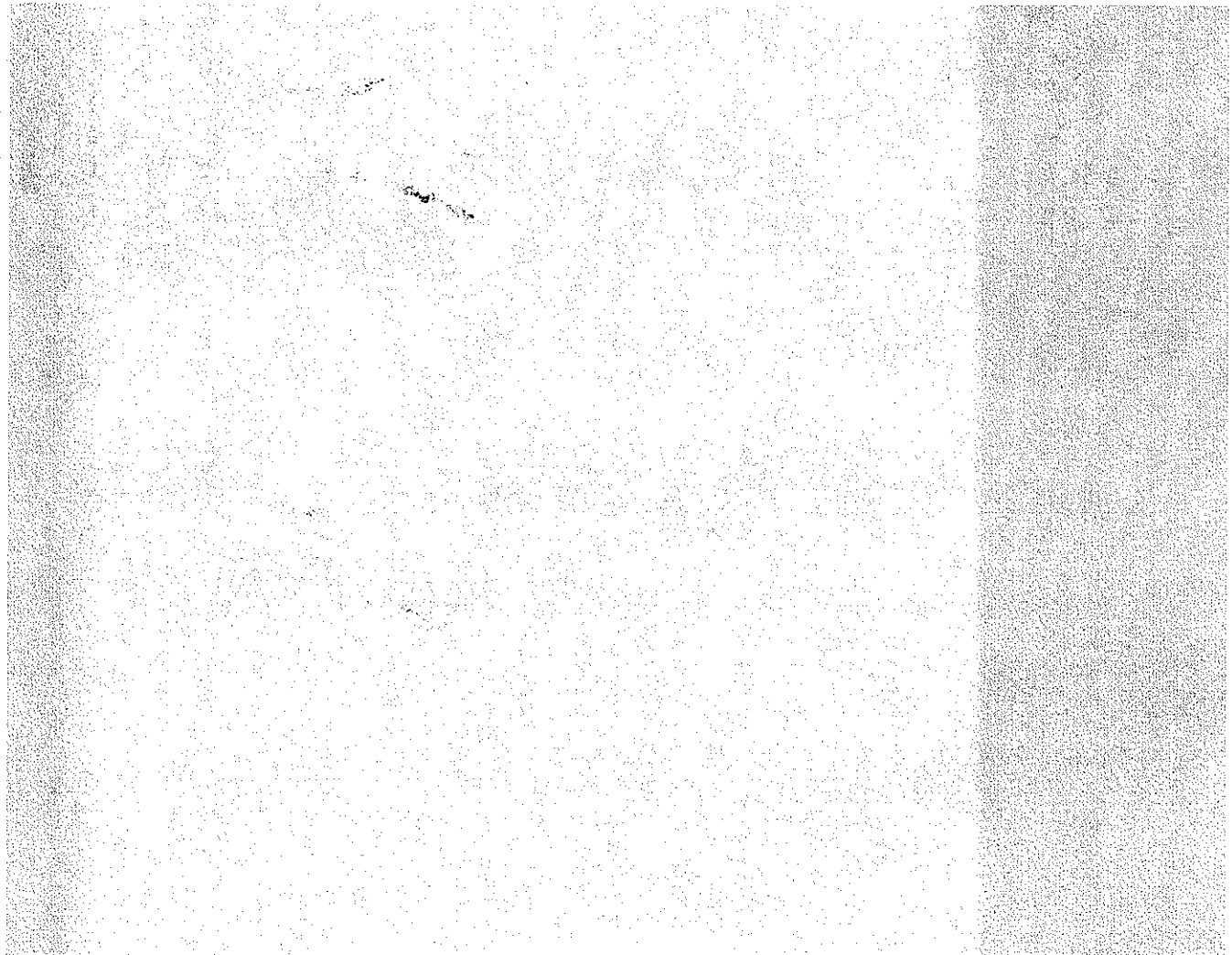


Caren T. Harris, MSN, PNP-BC  
Pediatric Nurse Practitioner  
Pediatric Trauma Program  
MassGeneral Hospital *for* Children

"Caren is wonderful," says Sharon. "Before we went to see her, my daughter was on a rollercoaster ride. Not only did I really careen's advice, but Megan's school also relied on her. With her help, we saw Megan's treatment finally go in the right direction."



DEPTH OF CARE: Masia left, with Harris in an Emergency Department pediatric exam room





## News

**MGH Hotline 4.3.09** It was just another soccer tournament for 14-year-old Megan Lund, a freshman at Needham High School, as she played on a field in Florida this past fall.

Post-trauma treatment

New MGHfC Trauma Clinic coordinates recovery care

03/Apr/2009

It was just another soccer tournament for 14-year-old Megan Lund, a freshman at Needham High School, as she played on a field in Florida this past fall. The game was going well until the final two minutes when Megan knocked heads with the goalie and her head on the ground after falling back from the impact. Rushed to the emergency room, she was told she did not have a concussion. Still, she returned home to Massachusetts with a variety of ailments -- including headaches, dizziness and drowsiness. Her mother, Sharon, knew something wasn't right.

"We took her to our pediatrician, who prescribed pain medication," she says. "But that actually made her headaches worse, she wasn't able to go to school while on narcotics."

Sharon describes feeling helpless until she learned from a "soccer dad" about the Trauma Clinic at MassGeneral Hospital for Children (MGHfC). The clinic, which is open every Tuesday, treats pediatric patients experiencing post-trauma symptoms.

One phone call later, Megan was scheduled for an appointment with Caren Harris, PNP, the pediatric nurse practitioner who established the clinic with pediatric trauma surgeon Peter Masiakos, MD. The clinic-- the only one of its kind-- provides follow consultations to ensure proper healing.

"Sometimes if you dig deeper, you find out there's more going on," says Harris. "This clinic provides the opportunity to help identify any ongoing issues and works with the child and his or her parents to optimize recovery."

After examining Megan, Harris determined she had suffered a concussion. She scheduled several follow-up visits and reach out to Megan's school to help ensure she would not overtax herself and slow down her recovery.

The Trauma Clinic at MGHfC provides comprehensive evaluation and timely specialty referrals for children who have sustain traumatic injury and previously undergone evaluation and treatment in a hospital or ambulatory setting. Some injuries may require the involvement of multiple specialists-- from neurologists to physical therapists-- to ensure that each patient receives the best possible treatment plan for a quick, successful recovery.

Masiakos says the idea for the clinic stemmed from years of service as a pediatric trauma surgeon during which he found that many patients had no place to go for effective follow-up care after their initial surgery or treatment.

"I've seen a lot of kids who experienced traumatic injuries and were evaluated and released with no plan for return to a physician," he says. "I've heard parents say that after a severe head injury, their kids were not the same and that their school suffered. Caren and I envisioned the clinic providing services these kids weren't getting elsewhere."

The clinic is living up to its expectations. Today, Megan is back to her normal self, taking all of her regular classes and playing soccer.

## Massachusetts Prevent Injuries NOW! Network

S. 796  
Support

September 15, 2009

Senator Susan Fargo  
Representative Jeff Sanchez  
Joint Committee on Public Health  
State House  
Boston, MA 02133

RE: Senate Bill 796

Dear Senator Fargo and Representative Sanchez:

As Chairman of the Massachusetts Prevent Injuries Now! Network (MassPINN), a CDC-funded coalition of more than 50 public health and public safety organizations devoted to reducing the amount and severity of injuries in the Commonwealth, I am writing in support of Senate Bill 796, introduced by Senator Steven Baddour.

Senate Bill 796, An Act relating to safety regulations for school athletic programs, is designed to codify many of the initiatives and activities currently undertaken by MassPINN and its partners in an effort to prevent, recognize and appropriately treat sports-related concussion injuries. The bill is based on a Texas law enacted in 2008 and is designed to protect children and help parents and coaches make informed decisions.

Last winter, The Massachusetts Prevent Injuries Now! Network officially entered into a partnership with Mass General Hospital, the state's chapter of the Academy of Pediatrics, and the Sports Legacy Institute, to begin aggressive promotion of the CDC's "heads up" youth sports concussion prevention materials. These partnerships were based on the recommendations of the Department of Public Health Traumatic Brain Injuries Task Force report in 2007. The Task Force report recommended strategies for addressing the growing problem of TBI in the state and specifically recommended forging new partnerships to prevent sports-related brain injuries among youth. This partnership represents the implementation of this prevention strategy.

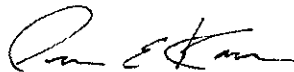
The CDC recently updated their estimate of sports and recreation concussion in the United States from 300,000 to between 1.6 and 3.8 million. The jump represents a new understanding that concussions are rarely reported to medical professionals because of a lack of understanding about the significance of a mild traumatic brain injury. For those that are diagnosed, MDPH's Injury Surveillance data indicates that sports and recreation-related traumatic brain injuries result in nearly 1,400 emergency department visits each year among high school age youth (ages 15-18). Another 1,305 children aged 9-14 are taken to emergency rooms with sports or recreation-related TBIs. In addition, another 99 children between the ages of 9 and 18 suffered brain injuries severe enough to require hospitalization.

Proper concussion diagnosis and management is key to preventing negative outcomes. Return to play during the 'window of vulnerability' after a concussion - where a secondary injury can exacerbate the first - often prevents student-athletes from achieving in school and can cause sudden death from second-impact syndrome.

Getting concussion diagnosis and management to the appropriate communities is a critical prevention strategy. In an effort to do this, MassPINN has been the umbrella organization distributing the CDC's "Heads Up" prevention kits. With the help of our partners the informative kits have been distributed to more than 1,000 Emergency Room directors, trauma prevention directors, youth coaches and school nurses in our Commonwealth. Via MGH, we have signed up such institutions as Children's Hospital, Boston; the Lahey Clinic and Tufts Medical Center; our DPH school nurses are heading efforts to get to the schools, and the Sports Legacy Institute, under the leadership of ex-Harvard football and World Wrestling Federation star Chris Nowinski (author of the seminal book "Head Games").

Senate Bill 796 is a needed step that will institutionalize the importance of protecting our youth athletes and ensure that parents, coaches, schools, and our medical professionals have tools to help them make informed decisions and prevent and treat sports-related concussions.

Sincerely,



Sean Kane  
Chairman MASS PINN



*The Commonwealth of Massachusetts*

HOUSE OF REPRESENTATIVES  
STATE HOUSE, BOSTON 02133

**KEVIN AGUIAR**  
STATE REPRESENTATIVE  
7TH BRISTOL DISTRICT

STATE HOUSE, ROOM 23  
BOSTON, MA 02133

TEL. (617) 722-2140  
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Rep. Kevin Aguiar@hou.state.ma.us

Committees on:  
Public Safety and Homeland Security  
Higher Education

Oct. 20, 2009

The Honorable Jeffrey Sanchez, House Chair  
Joint Committee on Public Health  
Room 130, State House  
Boston, MA 02133

The Honorable Susan C. Fargo, Senate Chair  
Joint Committee on Public Health  
Room 504, State House  
Boston, MA 02133

Dear Chairman Sanchez and Chairman Fargo,

I am writing to ask for your consideration of the following bill that is before your Committee:

**S796 – An Act Relating To Safety Regulations for School Athletic Programs**

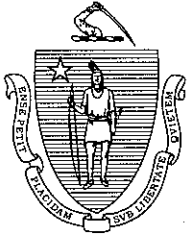
The safety of our students and especially those involved in athletic programs will be greatly enhanced by this legislation.

I request that the committee vote favorably on this legislation. Thank You for your consideration on this matter. Please feel free to call me if I can be of any assistance.

Best Regards,

A handwritten signature in black ink, appearing to read "Kevin Aguiar".

Kevin Aguiar  
State Representative



The Commonwealth of Massachusetts  
House of Representatives  
State House, Boston 02133-1054

S.796  
Support

DAVID B. SULLIVAN  
STATE REPRESENTATIVE  
6TH BRISTOL DISTRICT

799 NORTH MAIN STREET  
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Committees:  
Mental Health & Substance Abuse  
Municipalities & Regional Government  
Tourism, Arts & Cultural Development

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TEL. (617) 722-2666  
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E-Mail: Rep.DavidSullivan@hou.state.ma.us

August 26, 2009

The Honorable Susan C. Fargo, Senate Chair  
Joint Committee on Public Health  
State House, Room 504

The Honorable Jeffery Sanchez, House Chair  
Joint Committee on Public Health  
State House, Room 130

**Re: An Act Relating to safety regulations for school athletic programs (S.796)**

Dear Chairman Fargo and Chairman Sanchez:

I am writing in full support of Senate Bill No. 796, *act relating to safety regulations for school athletic programs*. I respectfully ask that the Committee issue a favorable report on S.796, and allow this matter to continue in the legislative process.

The passage of this bill will require the Division of Violence and Injury Prevention to develop an interscholastic athletic Head Injury Safety Training program. The Department will teach school employees and volunteers assisting with extracurricular athletic activities to recognize the symptoms of potentially catastrophic injuries, including head and neck injuries, concussions, and injuries related to second impact syndrome. This program will help prevent these injuries from occurring, and also give school employees the proper tools to react appropriately and efficiently if the situation does arise.

Thank you for your careful consideration of this issue. If you have any questions, please do not hesitate to contact my office.

Sincerely,

David B. Sullivan  
State Representative

## **Committee on Public Health Bill Summary**

<b>Bill No.</b>	S.796
<b>Title:</b>	An Act relating to safety regulations for school athletic programs.
<b>Sponsor:</b>	Senator Steven Baddour
<b>Committee:</b>	Public Health
<b>Hearing Date:</b>	September 15, 2009
<b>Similar Matters:</b>	None
<b>Prior History:</b>	New Bill

**Current Law:**

M.G.L. Chapter 111 establishes the Department of Health and its jurisdiction.

**Summary:**

- This legislation establishes head injury safety regulations for School Athletic Programs. These regulations apply to public schools and to any other school whose athletic programs are subject to Massachusetts Interscholastic Athletic Association rules.
- It directs the Commissioner of Public Health to establish an interscholastic athletic Head Injury Safety Training Program through the division of violence and injury prevention.
- The following parties must complete the Training Program:
  - A coach, parent volunteer or trainer for an extracurricular athletic school activity, a physician employed by a school and the marching band director.
- The training shall include current training in recognizing the symptoms of potentially catastrophic injuries. Students shall receive this training.



- DPH is further directed to develop “preparticipation physical evaluation-medical history” forms to be completed by each student participating in an extracurricular activity.
- This legislation establishes rules of conduct surrounding a student becoming unconscious during an extracurricular athletic activity.
- Records shall be kept by the superintendent of the school. Penalties for noncompliance will be established by the Massachusetts Interscholastic Athletic Association. The requirements of this legislation shall be posted at school.
- This legislation does not waive any liability or immunity of a school district or its officers or employees nor does it create any liability for a course of legal action against a school district or its officers or employees. A volunteer is not liable for civil damages arising out of an act or omission relating to the requirements of this legislation, unless the act or omission is willfully or wantonly negligent.