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Children's Committee  
Connecticut State Legislature  
Legislative Office Building  
Hartford, CT

RE: HB 5113 AN ACT CONCERNING YOUTH ATHLETICS AND CONCUSSIONS

Dear Representative Urban, Senator Bartolomeo, Representative Betts, Senator Linares,  
and the Distinguished Members of the Children's Committee:

For the record, I am Gerard A. Gioia, PhD, from Children's National Health System in Washington, DC. I am submitting written testimony in support of HB 5113 AN ACT CONCERNING YOUTH ATHLETICS AND CONCUSSIONS. Specifically, I write this letter in support of the amendments to the Connecticut State Law by including additional best practices with the intent to further protect the health of the state's student athletes.

As a healthcare professional with expertise in youth concussion evaluation and management, I have been working on the state youth concussion laws locally, regionally and nationally since the first set of laws were passed in 2009/ 2010, starting with Virginia as the third law passed in the US. I have been a member of the American College of Sports Medicine's youth concussion coalition effort since this time, working with the NFL, youth sports organizations, and professional organizations such as the National Academy of Neuropsychology to protect our youth athletes from the risks of concussion. We are proud to now have all 50 states and the District of Columbia with state concussion laws.

I believe strongly in the three provisions advocated for in HB 5113: explicit inclusion of parents and athletes in concussion education, the inclusion of non-scholastic youth sports, and limitations on contact in practice for all contact/ collision sports.

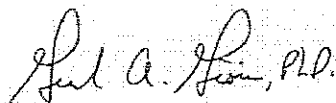
The education of parents and athletes is critical, and in fact central, to the concussion laws being best enforced. I have been an active member of the writing teams for the various CDC Heads Up educational toolkits for parents, athletes, coaches, healthcare providers and school personnel. We have excellent materials ready for use by youth and high school sports organizations to provide necessary education for each of these important stakeholder groups. Our experience is that when all parties – coaches, parents, athletes – are working with the same knowledge, the protections are maximized. Confusion amongst parents about what a concussion is and how it is managed is not uncommon and ultimately works against the most effective recognition and response to suspected injuries. It is not uncommon that injuries are missed on the field but the parent recognizes something amiss in their son/ daughter at home. It is so important that parents know what to look for and the actions to take. Many, many parents have told me they are not clear on the procedures they should take should an injury occur – highlighting the need for their education. Athletes must also be informed about the nature of the injury, its signs and symptoms and its risks. This is important not only for the athlete's own safety but also for that of their teammates. In our education of athletes, we stress the importance of taking responsibility for one's own brain health but also for that of one's teammates, who may not be able to make the appropriate decision in the midst of a concussion to remove themselves from play.

The youth concussion laws must extend beyond the high school level and include organized sports at all ages and levels – recreational, club/ travel teams. Simply stated, all children need the protection of these laws not just one segment. The signature youth concussion law in Washington State – the Zachary Lystedt Law – included youth leagues and high schools. In fact, Zach was an 8<sup>th</sup> grader when he was injured. Laws that focus only on high schools would not have provided him with the necessary protections. We believe all state laws should apply to the full age range of youth and high school sports. In addition, simply because the implementation mechanism for high school sports has a singular group – NFHS – this does not mean that younger athletes and adolescents in non-scholastic sports need these protections any less. In fact, presently, many of the National Governing Bodies of Sports (USA Football, US Lacrosse, USA Hockey, US Youth Soccer, and USA Rugby) are all examining ways to include concussion education and management in their organizational structures. There are, therefore, emerging mechanisms for making this law work for younger athletes. Presently, 15 of the 50 states include non-scholastic youth sports in their state laws, with others now amending their laws to include the full spectrum of youth sports. I would strongly encourage Connecticut to follow suit.

Finally, I would strongly support the amendment to the bill to limit on contact practices beyond the sport of football. It is critical that the bill include a provision to limit contact exposure for all contact/ collision sports with a goal of decreasing exposure to brain trauma. This is the recommendation of the NFL, Ivy League and Big Ten, Pop Warner Football, and USA Football. In Maryland, whose state sport concussion committee I am a member, made recommendations for state regulations to reduce contact exposure in the follow sports: football, boy's lacrosse, basketball, field hockey, girl's lacrosse, boys and girl's soccer, and wrestling. Ice hockey is not a varsity sport in Maryland so it was not included in the updated regulations. I have included the July 2013 recommendation, which was wholly supported by the Maryland State Board of Education, as an attachment to this letter.

In summary, I strongly support HB 5113 AN ACT CONCERNING YOUTH ATHLETICS AND CONCUSSIONS in its efforts to amend the state youth concussion law with the above three issues. I believe this bill will further strengthen Connecticut's law to protect all children from the dangers of concussion.

Sincerely,



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## Identification of Collision, Contact and Non Contact Sports and Recommended Concussion Injury Mitigation and Limitations of Contact Exposure

### Sport Classification

Collision	Contact	Limited Contact	Non Contact
<i>Consistent with the purpose of the game athletes hit or collide with each other or inanimate objects including the ground with great force.</i>	<i>Athletes routinely make contact with each other or inanimate objects but usually with less force than in collision sports.</i>	<i>Contact with other athletes or inanimate objects are less frequent or inadvertent.</i>	<i>Any contact is inadvertent and not expected.</i>
Football	Basketball	Baseball	Badminton
Ice Hockey	Field Hockey	Field Events: High Jump Pole Vault	Bowling
Boys Lacrosse	Girls Lacrosse	Softball	Field Events: Discus Shot Put Triple Jump Long Jump
	Soccer	Volleyball	Golf
	Wrestling		Swimming
			Track & Cross Country
			Tennis

## **Recommendations for Concussion Injury Mitigation and Reduction of Contact Exposure for Collision Sports**

By definition, those activities designated as Collision Sports may incur a high rate of concussion for participating athletes. Research indicates that in addition to proper instruction and drills a reduction of exposure to live contact should contribute to a lower rate of concussion injury.

### **Football**

#### **Rationale:**

*Research has demonstrated the rate of concussion injury in football is the highest among interscholastic sports. The National High School Sports Related Injury Surveillance Study 2011-12 found that head/face concussions accounted for 23.6 % of total injuries. Furthermore, the data details 95% of these injuries occur while blocking, being blocked, tackling or being tackled. Research data by the Ivy League and the NCAA have reported similar findings in the rate on concussions. Currently numerous national and state organizations, as well as three local school systems in the state of Maryland have implemented reductions to contact exposure during practice sessions.*

#### **Definitions:**

- Live Hitting is defined as football drills or live game simulations where full game speed blocking and tackling of players to the ground occurs.
- Full Padded is defined as players dressed and equipped in accordance with NFHS Football Rule 1-5 (equipment guidelines).

#### **Recommendations:**

1. Coaches should place special emphasis during practice sessions on proper techniques for blocking and tackling.
2. The following football practice restrictions are recommended to strike a balance between teaching proper technique and skills while limiting the number of live contact exposures.

#### **Pre-season:**

- No live hitting until day 6 of practice (Heat Acclimation Rules)
- Live hitting (full speed, go to ground contact) periods limited to full padded practice days.

#### **In-season (Beginning the Monday prior to the first play date):**

- A team may conduct full padded practice days, but may only participate in live hitting drills and live game simulations with live hitting no more than two practice days per week.
- Live hitting drills or live game simulations with live hitting shall not be conducted the day prior to a game.

## **Boys Lacrosse**

### **Rationale:**

*Research has demonstrated the rate of concussion injury in boys' lacrosse is among the highest within interscholastic sports. The National High School Sports Related Injury Surveillance Study 2011-12 found that head/face concussions accounted for 34.3 of reported injuries. NCAA data collected from 1988 to 2003 found the concussion injury rate in men's lacrosse to be 2<sup>nd</sup> only to football. Research by the Ivy League has reported similar collaborative data.*

### **Definition:**

- Body Checking is defined as contact typically made with a shoulder or chest to an opponent with both hands of the player applying the check remaining in contact with the cross.

### **Recommendations:**

1. Coaches should place special emphasis during practice sessions on proper techniques for body checking that avoids contact with or to the head.
2. The following boy's lacrosse practice restrictions are recommended to strike a balance between teaching proper technique and skills while limiting the number of live contact exposures.
  - After the 1<sup>st</sup> play date, schools are limited to a maximum of one full-contact practice per day.
  - No live body checking allowed in practice the day prior to a game. (Stick checking is permitted.)

## **Recommendations for Concussion Injury Mitigation in Contact Sports**

While activities classified as Contact Sports are not specifically structured to provide for intentional physical contact between participants like Collision Sports, the incidence of game/sport related contact between players and/or equipment cannot be totally avoided. Providing athletes with proper instruction and drills emphasizing proper techniques should contribute to a lower rate of concussion injury.

### **Rationale:**

*Research has demonstrated that the rate of concussion in contact sports indicates the need for special emphasis on specific sports related skills. The National High School Sports Related Injury Surveillance Study 2011-12 indicated skill-related activities that led to the highest incidents of head/face concussion injury. Thus the instruction and drill of proper techniques in these specific sport segments is essential in order to minimize potential for injury.*

### **Sport Recommendations:**

#### **Basketball**

- Coaches will place special emphasis on proper techniques on play involving body-to-body contact specifically rebounding, picking, screening and shot blockage.

#### **Field Hockey**

- Coaches will place special emphasis on proper techniques on dual challenges specifically where the potential for body-to-body or body-to-stick contact can occur.

#### **Girl's Lacrosse**

- Coaches will place special emphasis on proper techniques specifically for player positioning and stick checking.

#### **Soccer**

- Coaches will place special emphasis during practice sessions specifically on proper individual heading techniques, heading duals and aerial challenges.

#### **Wrestling**

- Coaches will place special emphasis specifically on proper takedown techniques and aspects of competitions involving contact to the head.

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