

**MEMORANDUM**

**To:** ACRM  
**From:** Powers Legislative Practice Group  
**Date:** May 25, 2016  
**Re:** Summary of Energy & Commerce Oversight & Investigations Subcommittee Hearing on Concussions in Youth Sports

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**Overview**

On Friday, May 13, the House Energy & Commerce Oversight & Investigations Subcommittee held a hearing, following an initial roundtable discussion in March, to examine concussions and head trauma in youth sports. The hearing, led by Oversight & Investigations Subcommittee Chairman Tim Murphy (R-PA), was entitled “Concussions in Youth Sports: Evaluating Prevention and Research.” A webcast and additional information is available on the Committee [website](#).

The hearing focused primarily on preventive measures and efforts to better protect young athletes from brain trauma, as well as next steps in developing evidence-based policies to reduce the rates of injuries. According to Chairman Murphy’s opening remarks, estimates suggest that more than 30 million children (ages 5-18) participate in organized sports each year. Despite this large number, there lacks a substantial level of awareness, prevention, and research related to head trauma and injuries among child and adolescent athletes.

The Subcommittee hearing began with moving testimony from mothers of athletes that died as a result of head injuries sustained on the football field. They called for more education and awareness among parents, coaches, and athletes in order to better prevent, detect, and treat brain injuries. Other witnesses during the two panel hearing shared expert testimony from the medical, athletic, and additional stakeholder organizations. Overall, witnesses stressed the need to change the structure of practices and play for youth sports, as well as calling for immediate action from the government to implement and enforce policies that promote safety, education, and surveillance data collection.

Several members of the Subcommittee were in attendance and demonstrated deep and personal interest in the issue. Many expressed that they felt participation in sports is an extremely valuable experience for children and adolescents, both in a sense of physical activity and in teaching fundamental life skills. However, several members did have concerns over even their own children participating in contact sports and the potential injuries they could endure. Various members also mentioned they were concerned that if contact in youth sports was limited or prohibited, children would lose interest and ultimately quit at any early age. All members present acknowledged the danger posed by contact sports and the devastating injuries they can

cause, but were inquisitive on the best next step to take in terms of preventive measures and policies.

## Questions

- Chairman Murphy:
  - What policies and guidelines are currently in place to limit the risk of injury?
  - How are these policies developed and do they go far enough?
  - What educational and training policies exist for athletes, coaches, and parents?
  - How does the large number of disparate leagues, teams, clubs and recreational opportunities available to young athletes complicate efforts to improve injury prevention?
  - Are the current state laws on concussions in youth sports substantial enough?
  - How do we minimize injury based on science?
  - What is the greatest need to protect kids in youth sports?
  - Are we currently doing enough to protect kids from injuries?
  - Do coaches keep track of their own teams' data, in terms of injuries?
  - How significant is unreported data?
  
- Representative DeGette:
  - How do concussion rates differ between boys and girls? Is there a different effect on the brains of boys than girls?
  - What age should kids start playing contact sports?
  - How do we teach coaches to teach safer practices?
  - What is the safest way to tackle?
  - Do we have enough science and evidence to act on this issue?
  - How do we develop a national surveillance program for concussions?
  
- Representative Burgess:
  - How do we develop great athletes without repetitive practice?
  - Is there a difference in the quality of play and player if we eliminate tackling from football?
  
- Representative Schakowsky:
  - What do we know about the link between Chronic Traumatic Encephalopathy (CTE) and contact sports?
  - Is there any way to identify CTE before an autopsy?
  - What is the role of helmets in protecting against these injuries?
  - Why hasn't USA Football removed tackling from youth football?
  
- Representative Hudson:
  - Does waiting until you are older to learn how to tackle hurt your chances of playing at a higher level?
  - Are full tackle practices necessary for success on game day?

## Experts

### Panel One:

- Kelli Jantz, R.N., the mother of Jake Snakenberg and Concussion Advocate
- Karen Zegel, the mother of Patrick Risha and Chronic Traumatic Encephalopathy (CTE) Advocate

### Panel Two:

- Mr. Buddy Teevens, Head Football Coach, Dartmouth College
- Dr. Andrew Gregory M.D., Member of Medical Advisory Committee, USA Football; Pediatric Sports Medicine, Vanderbilt University Medical Center
- Mr. Kevin Margarucci, Manager, Player Safety, USA Hockey
- Mr. Steve Stenersen, President and CEO, US Lacrosse
- Mr. Terry O'Neil, Founder, Practice Like Pros
- Dr. Dawn Comstock, Associate Professor, Department of Epidemiology, Colorado School of Public Health
- Dr. Thomas Talavage, Professor, School of Electrical & Computer Engineering, Weldon School of Biomedical Engineering, Purdue University

## Testimony & Conclusions

**Football.** Mr. Teevens completely eliminated tackling from Dartmouth football team practices. His decision was initially met with extreme opposition and uncertainty as much of his coaching staff thought the team's overall performance would suffer. Mr. Teevens instead reported resulting injury reduction since his decision has been "phenomenal" and the team has not suffered at all in terms of performance and victories.

Dr. Gregory discussed USA Football's "Heads Up Football" program. The program educates football coaches on recognition and response of concussions and brain injuries, as well as promotes a tackle-less practice. It teaches coaches new ways to effectively coach tackling without athletes having to tackle teammates during practice. The program reported a 76% reduction in injuries in practices among teams participating in "Heads Up" over teams that do not participate in the program.

**Hockey.** Mr. Margarucci discussed USA Hockey's efforts to reduce brain injuries. As of 2011, the association prohibited body checking in 12 and under leagues. Additionally, the association has developed a comprehensive officiating education program to ensure referees enforce a safer level of play. Online education modules have been developed for coaches and to assist in detection of signs and symptoms. USA Hockey is also funding a Mayo Clinic study regarding sideline concussion detection.

**Lacrosse.** Mr. Stenersen noted that USA Lacrosse has developed the first education program for officials and coaches in the sport to promote awareness and safer practices. He also called for the need for further research to better understand how brain injuries differ between boys and

girls. This is particularly relevant in lacrosse because rules and play are very different between genders.

**Preventative policies.** Mr. O’Neil stressed the need for immediate action by Congress to implement preventive policies. Practice Like the Pros is based on the concept that by just eliminating contact and tackling from high school football practices there would be a dramatic reduction in brain injuries. He noted most NFL teams currently follow this rule of conduct and limit contact to in season games. As a result, the number of concussions in practices fell to only 3% of total reported in season concussions in the NFL. O’Neil reported that currently about 60-75% of all high school sports concussions occur during practice. He concluded by presenting a list of recommendations that included converting youth football leagues to flag football, prohibiting contact football until the 9<sup>th</sup> grade, and eliminating contact from all practices.

**Concussion statistics.** Dr. Conway presented research on concussions demonstrating that in the past few years the rate of reported concussions has increased and recently, it has begun to flat line. She attributed this increase with a heightened level of awareness within the sports community. She also noted that in 2008 more than 15% of high school players with head injuries returned to play within two days however, in 2015, less than 10% of players with head injuries returned to play within six days. While Dr. Conway celebrates these improvements, she stressed the need for a national surveillance data system across all genders and sports to provide evidence and better support policies. She suggested the system be funded by the federal government or by the independent sport association and leagues.

**Purdue Neurotrauma Group study.** Dr. Talavage cited the Purdue Neurotrauma Group (PNG) study, which was initiated in 2009 and represents the largest and most comprehensive study to-date of youth athletes exposed to repetitive sub concussive hits in high school-aged girls and boys, playing soccer and football. Study results demonstrate that the number of head impacts per week and their magnitude must be limited and that monitoring of such injuries is feasible. To achieve the goal of wider and safer participation, PNG proposes improving education of stakeholders regarding “safer” levels of contact and how to avoid inducing such events during practices; improved protective equipment, specifically focused on preventing energy transmission to the brain; automated monitoring of athletes exposed to head trauma that is likely to contribute to brain injury; and, improving training of athletes to minimize head injuries.

**Conclusion and next steps.** The hearing concluded with both the Committee and witnesses acknowledging the improvements made in recent years surrounding education, awareness, and prevention of head injuries in youth sports. However, the Committee also recognized the need for additional hearings and further consideration of research and testimony in order to determine how best to move forward. The panel underscored the importance of timing and urged the Committee to act as swiftly as possible, noting more comprehensive prevention and education polices could save lives every day.