IN THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS
COUNTY DEPARTMENT, CHANCERY DIVISION

DANIEL BUKAL, individually and on behalf of all others similarly situated, Plaintiff, v. ILLINOIS HIGH SCHOOL ASSOCIATION, Defendant.	)	No. **JURY TRIAL DEMANDED**

CLASS ACTION COMPLAINT

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TABLE OF CONTENTS

Plaintiff Daniel Bukal ("Bukal" or "Plaintiff") brings this class action complaint against Defendant Illinois High School Association ("IHSA"), individually and on behalf of all others similarly situated, and complains and alleges upon personal knowledge as to himself and his own acts and experiences, and, as to all other matters, upon information and belief, including investigation conducted by his attorneys.

I. INTRODUCTION

1. The most important battle being waged on high school football fields across this State is not the competition to determine the winner and loser of a game, or even a State championship. It is the battle for the health and lives of the developing adolescents competing on those fields.

2. It is now widely understood and acknowledged that concussions pose serious risks to participants in contact sports, and especially football. Among those risks are brain trauma and potentially debilitating long-term brain injuries. But if the problem of concussions in sports is a crisis, then it would be accurate to call the particular problem of concussions in high school sports an epidemic.

3. High school football players typically range in age from 14-19 years – a point in physical development when their bodies and brains are still going through crucial developmental changes, and which make the brain increasingly susceptible to trauma. Such injuries are further compounded by social and environmental factors given the stage in adolescent life when they occur. Concussions may disrupt daily living and participation in school and activities; may cause student-athletes to miss weeks or even months out of the school year, affecting marks and risking their promotion to the next grade; and may cause mood imbalances and disorders, which further add to social isolation potentially caused by the sudden cessation of athletic and team activity.

4. In Illinois high school football, responsibility – and, ultimately, fault – for the historically poor management of concussions begins with the IHSA.

5. The IHSA's Constitution states that the IHSA's objectives include "supervis[ing] and regulat[ing] all of the interscholastic activities in which its member schools may engage." For years, the IHSA has been derelict in those duties.

6. And despite the passage of the "Protecting Our Student Athletes" Act in Illinois in 2011, the IHSA's systemic failure to properly manage concussions persists.

7. The Illinois Act required the IHSA to: (i) inform and educate youth athletes and their parents and guardians on concussions; (ii) mandate removing an athlete who appears to have suffered a concussion during a game or practice; and (iii) mandate that a youth athlete be cleared by a licensed health care professional trained in the evaluation and management of concussion before returning to play in a game or practice.

8. But unlike many other similar laws around the country intended to address the issue of protecting youth athletes from concussions, the Act does not mandate specific guidelines or rules on managing student-athlete concussions and head injuries.

9. Instead, the Act requires individual school boards to pass policies that comply with the IHSA "protocols, policies, and by-laws" regarding "student-athlete concussions and head injuries." Thus, ***the Act made the IHSA solely responsible for promulgating the rules that would minimize the risk of concussions in Illinois' student-athletes***.

10. Put simply, the Act is designed to allocate much of the substance behind this general framework to the IHSA, and that is where many deficiencies persist.

11. Among other things, as measured against the industry-standard protocols and practices widely understood today, the IHSA:

- Fails to mandate the removal of athletes who have appeared to suffer concussions in *practice* (as opposed to games);

- Fails to implement pre-season and regular season baseline testing for detecting and managing concussions;

- Fails to track and report concussions (and require such reporting from member schools) in order to have complete data that will enable IHSA to adopt best practices for combatting concussions;

- Fails to require medical personnel at IHSA football contests with specific expertise in concussion diagnosis, treatment, and management;

- Fails to require that medical personnel be available and on-call for the football *practices* of IHSA's member schools (as opposed to games);

- Fails to mandate any concussion education and training of athletic trainers at member schools; and

- Fails to take measures for educating teachers and other school personnel on how to implement recommendations from the doctors of concussed athletes and make appropriate accommodations.

12. This lawsuit therefore seeks the following remedies. First, on behalf of the Class, Plaintiff seeks injunctive relief intended to correct the deficiencies with IHSA's current policies and procedures and bring those practices in line with the current research and best practices for handling concussions in youth athletes. This will include, among other things:

- Implementation of a concussion protocol that protects student athletes at practice, as well as games;

- Implementation of pre-season baseline testing;

- Implementation of a program for concussion reporting and tracking;

- Implementation of policies requiring the presence of medical personnel with specific expertise in managing, identifying, and treating concussions at IHSA football games;

- Implementation of policies requiring the availability of medical personnel with specific expertise in managing, identifying, and treating concussions at the football practices of IHSA member schools;

- Implementation of a program for educating the trainers working with IHSA member schools' football teams;

- Implementation of system-wide guidelines for the screening and detection of head injuries; and

- Implementation of a program for educating the faculty of IHSA member schools on concussions and their identification.

13. Second, on behalf of the Class, Plaintiff seeks Medical Monitoring. In particular, Plaintiff seeks the establishment of a fund to pay for the medical monitoring of Class members and to provide notice to Class members that they may require Medical Monitoring.

II. JURISDICTION AND VENUE

14. This Court has personal jurisdiction over IHSA under 735 ILCS 5/2-209 because IHSA is subject to general personal jurisdiction in the State of Illinois, and because this action arises from IHSA's transaction of business in Illinois and tortious acts that occurred in Illinois.

15. Venue is proper under 735 ILCS 5/2-101 because Plaintiff is a resident of this County and because a substantial part of the events and/or omissions giving rise to the claims occurred in this County.

16. Pursuant to General Order No. 1.2 of the Circuit Court of Cook County, this action is properly before the Chancery Division of the County Department because it is a Class Action.

III. PARTIES

Plaintiff Bukal

17. Daniel Bukal is a natural person and a citizen of the State of Illinois.

18. From 1999 to 2003, he attended Notre Dame College Prep, an IHSA member school, located in Niles, IL. Bukal played football all four years he attended Notre Dame. Bukal received numerous accolades, including: serving as his team's Captain; being named the team's

offensive MVP; breaking the school's single season passing record; and being named to the East Suburban Catholic Football League's All-Conference Team.

19. During that time, Bukal sustained multiple concussions playing or practicing football. Before or after sustaining these concussions, Bukal never received any literature or lectures about concussions.

20. Bukal's school also had no concussion protocol or return to play guidelines, as the IHSA had yet to adopt any policies and procedures on this subject during Bukal's playing days. After suffering a concussion, Bukal was sometimes cleared by a doctor, and other times was only cleared by his school's athletic trainer. The criteria for returning Bukal to the playing field was not uniform and followed no consistent, medical protocol that would ensure Bukal's return to the field would be safe.

21. To this day, Bukal still suffers from the lingering effects of his concussions. Bukal gets frequent bouts of lightheadedness, suffers from migraines, and has experienced significant memory loss.

22. Bukal is also at increased risk of latent brain injuries caused by repeated head impacts as well as the accumulation of concussive and subconcussive hits in his football career and therefore is in need of medical monitoring. Further, on behalf of the Class, Bukal seeks class-wide injunctive or equitable relief in the form of changes to IHSA's Football rules and practices with respect to concussion management.

Defendant IHSA

23. Defendant Illinois High School Association is a not-for-profit association that acts as the governing body of Illinois High School interscholastic athletics games and contests, including football. Its principal office is located in Bloomington, Illinois. According to its

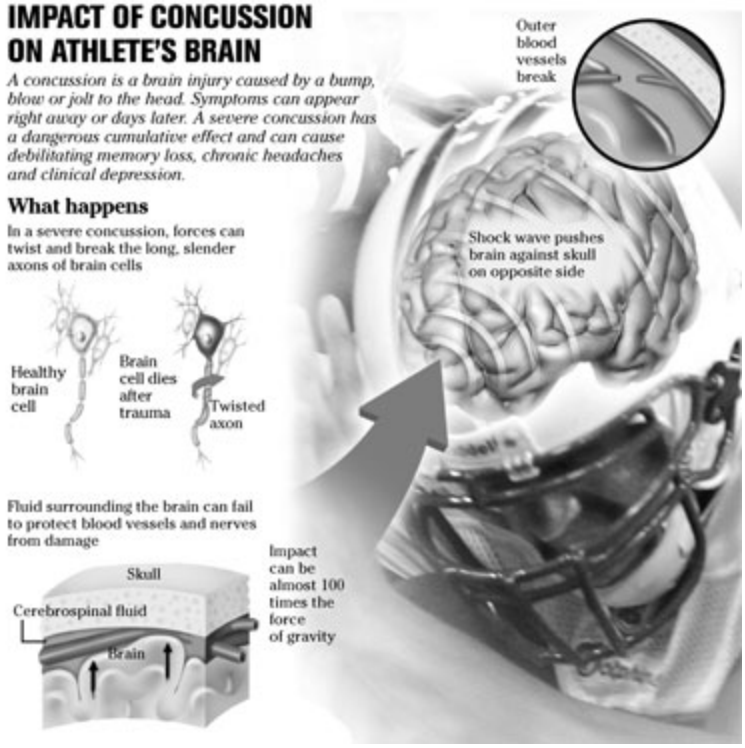
website, the IHSA oversees 29 championships in 31 sports. Nearly 800 schools are members of the IHSA and dozens of thousands of Illinois' student athletes participate in IHSA governed athletics. On average, the IHSA collects $10 million in annual revenue.

IV. FACTUAL BACKGROUND

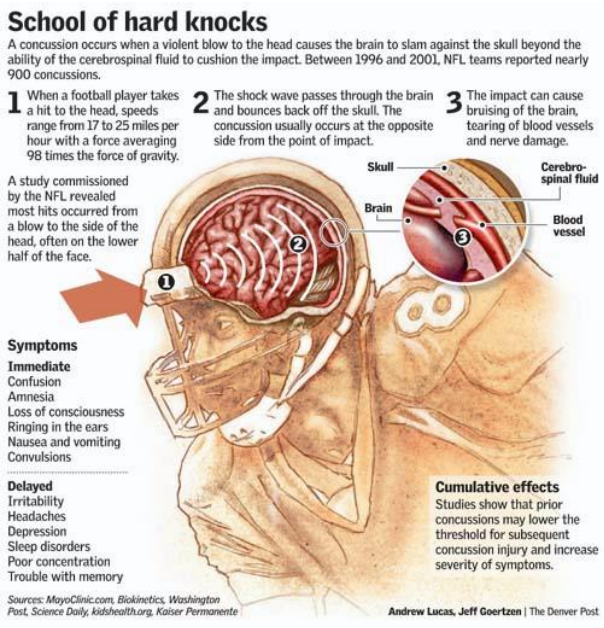
A. General background on concussions.

24. The word concussion derives from the Latin *concutere*, translated as "to shake violently." Concussions are just that – a shaking of the brain inside the skull that changes the alertness of the injured person. That change can be relatively mild ("slightly dazed") or profound ("unconscious"). Both situations fall within the technical, medical definition of concussion. Concussions are often classified as a form of mild traumatic brain injury.

25. Concussions happen to all types of athletes – young and old, boys and girls, and in every conceivable sport. Concussions can and frequently do occur without any contact with the head, including in situations when the player's body receives a jolt that causes his shoulders and head to change speed or direction violently. This motion results in a "whiplash effect." Inside the skull, the brain shifts in the cerebrospinal fluid and bangs against the inside of the skull. This general process is depicted in the following image:



26. Concussions that are the most damaging to the brain tend to be the ones that involve a direct blow to the head, however. With a blow to the front of the head, the brain pushes forward until it crashes into the skull, reverses, and bumps against the back of the skull. This process is depicted in the following image:



27. Subconcussive hits, or impacts that do not produce any clinical concussion symptoms, may also adversely affect cerebral function. Evidence that subconcussive hits may adversely affect cerebral function has been reflected in documented changes in cerebral function (*i.e.*, visual working memory declines), and altered dorsolateral prefrontal cortex activation as assessed by functional magnetic resonance imaging in high school football athletes in the absence of clinical signs of concussion.

28. Concussions or a combination of concussions and sub-concussive head impacts may lead to conditions such as chronic traumatic encephalopathy, mild cognitive impairment, and/or depression.

29. All concussions are accompanied by symptoms which fall into four major categories:

Somatic:	Headaches, nausea, vomiting, balance and/or visual problems, dizzy spells and issues such as sensitivity to light and noise.
Emotional:	Sadness to the point of depression (even suicide), nervousness, and irritability.
Sleep disturbance:	Sleeping more or less than usual and trouble falling asleep.
Cognitive:	Difficulty concentrating, troubles with memory, feeling mentally slow or as if in a fog that will not lift.

30. Symptoms reveal the severity of the injury and the pace of recovery. The number and combination of symptoms also can pinpoint areas of the brain affected by a concussion. Those cases in which the symptoms are focal, *i.e.*, the injury is to one brain area, tend to have fewer symptoms of shorter duration. When trauma is diffuse, *i.e.*, spread across several brain regions, the patient has more symptoms that persist longer.

B. Why High School Football Players Are Particularly Vulnerable to Concussions.

31. High school football players typically range in age from 14-19 years old and regularly engage in fast-paced, highly competitive practices and contests while their bodies and brains are still going through crucial developmental changes. Injuries that occur during this stage in an athlete's life can have long-term, debilitating effects that range from an inability to finish the athlete's education, to loss of memory, to depression, and early-onset dementia.

32. For young people ages 15 to 24 years, sports are the second leading cause of traumatic brain injury, only behind motor vehicle crashes. According to research by the *New York Times*, at least 50 youth football players (high school or younger) from 20 different states have died or sustained serious head injuries on the field since 1997.[1] One study estimates that the likelihood of an athlete in a contact sport experiencing a recognized concussion is as high as 20 percent each season.[2]

33. Scientists have attributed these dangerously high rates of concussions in high school athletes to several factors including the "vulnerability of the youth brain," noting that the brains of high school football players are still developing when subjected to concussive impacts in football.[3]

34. Studies in boxing, hockey, and football reveal that the earlier one is exposed to greater brain trauma, the greater the risk of long-term problems:

- A study of boxers found that for those with less education, psychomotor speed scores declined significantly with increasing years of fighting.[4]

[1] Schwarz, A, Silence on Concussions Raises Risks of Injury. NEW YORK TIMES, September 15, 2007.

[2] Gerberich, SG, JD Priest, JR Boen, et al. Concussion incidences and severity in secondary school varsity football players. Am J Public Health; 1983; 73:1370-1375.

[3] Broglio, *et al., Journal of Athletic Training* (August 2009); Moser, *et al., Neurosurgery* (August 2005); Guskiewicz, *et al., The American Journal of Sports Medicine* (2000).

[4] Banks, SJ, Obuchowski, N, Bernick, C. The Protective Effect of Education on Cognition in Professional Fighters. Archives of Clinical Neuropsychology 29 (2014) 54-59.

- A study of college football players found a significant relationship between the number of years played and a smaller hippocampus, an area of the brain essential for creating new memories.[5]

- In younger children, the long-term effects of brain trauma can become apparent years after injury, as normal developmental milestones are disrupted.[6]

35. Worse yet, 11% of children who suffer a concussion still have symptoms three months later.[7] Persistent post-concussion symptoms can be devastating. According to the Ontario Neurotrauma Foundation, persistent symptoms disrupt daily living and participation in school and activities.[8] Children/adolescents may:

- Miss weeks or even months out of the school year, affecting marks and risking their promotion to the next grade;

- Have attention and memory deficits, making schoolwork a challenge and requiring special accommodations to maintain required academic levels;

- Become clumsy and accident prone, where once they were strong athletes; and

- Become socially withdrawn to cope with headaches and mood changes, on top of the social isolation caused by resigning from athletic teams.

36. Chris Nowinski, executive director of the Sports Legacy Institute, characterized the lack of trained medical doctors and athletic trainers at high school games as particularly troublesome given the age of the student-athletes:

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[5] Singh R, Meier TB, Bellgowan PS. Relationship of collegiate football experience and concussion with hippocampal volume and cognitive outcomes. JAMA. 2014 May 14;311(18):1883-8. doi: 10.1001/jama.2014.3313.

[6] Daneshvar DH, Riley DO, Nowinski CJ, McKee AC, Stern RA, Cantu RC. Long-term consequences: effects on normal development profile after concussion. Physical medicine and rehabilitation clinics of North America 2011;22:683-700, ix.

[7] Barlow KM, Crawford S, Stevenson A, et al. Epidemiology of Postconcussion Syndrome in Pediatric Mild Traumatic Brain Injury. Pediatrics 2010;126(2):e374 e381.

[8] Zemek, Roger et al. Guidelines for Diagnosing and Managing Pediatric Concussion. Ontario Neurotrauma Foundation 2014.

> You look at the situation and you say if that is what grown men demand to play a game we know has immense risks, if you look at that as the way it should be done -whether or not that's the way you believe, if that's the model, it's hard to justify exposing kids of any age under 18 on a philosophical level to the same sport without any of those infrastructures and any of those resources. High school has no limits of any level of practice exposure, which is terrible, but there's also no leadership in the high school community to actually implement that in any simple way.[9]

37. What is more, only about half of all high schools have access to an athletic trainer, with even fewer having access to an athletic trainer present on the sidelines or on call to help identify concussions during play. One national study of over 100 high schools showed that schools with athletic trainers may identify up to 8 times as many concussions.[10]

38. Without medical doctors or athletic trainers present, those players suffering from a concussion often remain in the game or practice. If they are removed from a game, the players often return to team activities in less time than if a trainer or doctor continued to monitor the player's condition until symptoms cleared and recovery was complete. Guskiewicz, *et al.* determined in one study that 40% of concussed high school football players returned to play the same day, and 20% of that group never left the game for any amount of playing time.

C. Consensus Best Practices for the Treatment of Concussions for the Period 2002-Present.

1. Vienna Protocol.

39. As of 2002, consensus had been reached in the medical and scientific community for the cornerstones of the management and treatment of concussions.

40. The "Summary and Agreement Statement of the First International Conference on

[9] Roundtable Discussion Transcript, *Sports & Society: A Program of the Aspen Institute* (November 9, 2012).

[10] LaBella C, et al. "A comparative analysis of injury rates and patterns among girls' soccer and basketball players at schools with and without athletic trainers from 2006/07-2008/09" *AAP* 2012.

Concussion and Sport, Vienna 2001" ("International Consensus Statement" or "Vienna Protocol") was published in early 2002 simultaneously in the *Clinical Journal of Sports Medicine*, *Physician and Sports Medicine* and *British Journal of Sports Medicine*.[11] The expert group who compiled the International Consensus Statement, known as the "Concussion in Sport Group," was comprised of a panel of world experts and was organized by the International Ice Hockey Federation, the Federation Internationale de Football Association Medical Assessment and Research Center (*i.e.*, FIFA), and the International Olympic Committee Medical Commission (IOC). The International Consensus Statement was intended to be, and accepted as, "a comprehensive systematic approach to concussion to aid the injured athlete and direct management decisions." It was also intended to "be widely applicable to sport related concussion" and "developed for use by doctors, therapists, health professionals, coaches, and other peopled involved in the care of injured athletes, whether at the recreational, elite, or professional level." The Concussion in Sport Group subsequently met in Prague (2004),[12] Zurich (2008),[13] and Zurich again (2012), and published updated Consensus Statements. The International Consensus Statement set forth a revised definition of concussion, a standard concussion-management protocol, and discussed the issues of prevention, education, and future directions for the injury.

41. The first International Symposium on Concussion in Sport was held in Vienna, Austria ("Vienna Conference") in 2001. The goal was to provide recommendations for the improvement of safety and health of athletes who suffer concussive injuries. The result of the

[11] M. Aubry et al., *Summary and Agreement Statement of the First International Conference on Concussion in Sport, Vienna 2001*, 36 BRIT. J. SPORTS MED. 6 (2002) ("Vienna Protocol").

[12] P. McCrory et al., *Summary and Agreement Statement of the 2nd International Conference in Concussion in Sport, Prague 2004*, 39 BRIT. J. SPORTS MED. 196 (2005) ("Prague Protocol").

[13] P. McCrory et al., *Consensus Statement on Concussion in Sport: The 3rd International Conference on Concussion in Sport held in Zurich*, 43 BRIT. J. SPORTS MED., i76, i78 (2009) ("Zurich Protocol").

conference was the publication of a consensus statement that was "a comprehensive systematic approach to concussion to aid the injured athlete and direct management decisions" ("Vienna Protocol"). The publication was intended to "be widely applicable to sport related concussion" and was "developed for use by doctors, therapists, health professionals, coaches, and other people involved in the care of injured athletes, whether at the recreational, elite, or professional level."

42. The Vienna Protocol recommended specific return-to-play guidelines. The Vienna Protocol stated:

> When a player shows ANY symptoms or signs of a concussion:
>
> (1) The player should not be allowed to return to play in the current game or practice.
>
> (2) The player should not be left alone; and regular monitoring for deterioration is essential.
>
> (3) The player should be medically evaluated after the injury.
>
> Return to play must follow a medically supervised stepwise process.
>
> A player should never return to play while symptomatic. 'When in doubt, sit them out!'

43. The Vienna Protocol also recommended a return-to-play stepwise process as follows:

> It was the consensus of the CISG that a structured and supervised concussion rehabilitation protocol is conducive to optimal injury recovery and safe and successful return to play. The rehabilitation principles were common to all identified programmes and are outlined below. Important principles state that the athlete be completely asymptomatic and have normal neurological and cognitive evaluations before the start of the rehabilitation programme. Therefore, the more prolonged the symptom duration, the longer the athlete will have sat out. The athlete will then proceed stepwise with gradual incremental increases in exercise duration and intensity, and pause or backtrack with any recurrence of concussive symptoms. It is appreciated that, although each step may take a minimum

> of one day, depending on the duration of symptoms, proceeding through each step may take longer in individual circumstances.

44. The Vienna Protocol provided that return to play after a concussion follows a stepwise process:

> (1) No activity, complete rest. Once asymptomatic, proceed to level.
>
> (2) Light aerobic exercise such as walking or stationary cycling.
>
> (3) Sport specific training – for example, skating in hockey, running in soccer.
>
> (4) Non-contact training drills.
>
> (5) Full contact training after medical clearance.
>
> (6) Game play.
>
> With this stepwise progression, the athlete should continue to proceed to the next level if asymptomatic at the current level. If any symptoms occur after concussion, the patient should drop back to the previous asymptomatic level and try to progress again after 24 hours.

45. In regards to sideline evaluation, the Vienna Protocol noted that "sideline evaluation includes clinical evaluation of signs and symptoms, ideally using a standardized scale of postconcussion symptoms for comparison purposes, and acute injury testing as described below under neuropsychological testing." The Vienna Protocol recommended tests such as the Maddock's questions and the Standardized Assessment of Concussion (SAC) as effective in concussion diagnosis and also stated:

> Sideline evaluation including neurological assessment and mental status testing is an essential component in the protocol. These evaluations are ideally developed in language translations for international sporting groups … In the acute assessment of concussive injury – that is, concussion diagnosis – brief neuropsychological test batteries that assess attention and memory function have been shown to be practical and effective. Such tests include the Maddock's questions and the Standardised Assessment of Concussion (SAC). It is worth noting that standard orientation questions – for example, time, place, person – have

> been shown to be unreliable in the sporting situation compared with memory assessment.
>
> It is recognised, however, that abbreviated testing paradigms are designed for rapid evaluation of concussion on the sidelines and are not meant to replace comprehensive neuropsychological testing, which is sensitive enough to detect subtle deficits that may exist beyond the acute episode.

46. In regards to baseline testing and neuropsychological testing, the Vienna Protocol provided that "[o]verriding principles common to all neuropsychological test batteries is the need for and benefit of baseline pre-injury testing and serial follow up." It noted that the application of neuropsychological testing "has shown to be of value and continues to contribute significant information in concussion evaluation … It has been shown that cognitive recovery may precede or follow resolution of clinical symptoms, suggesting that the assessment of cognitive function should be an important component in any return to play protocol." Further, "the consensus of the CISG was that neuropsychological testing is one of the cornerstones of concussion evaluation and contributes significantly to both understanding of the injury and management of the individual. Organised sport federations have access to and should attempt to employ such testing as appropriate. To maximize the clinical utility of such neuropsychological assessment, baseline testing is recommended."

47. Finally, the Vienna Protocol acknowledged education of athletes, colleagues, those working with athletes and the general public as a "mainstay of progress in this field." The Vienna Protocol also recommended the "consideration of rule changes" and noted that "rule enforcement is a critical aspect of such approaches and referees play an important role."

2. 2004 National Athletic Trainers' Association Position Statement: Management of Sport-Related Concussion.

48. A second consensus document on concussion management was issued in 2004 when the National Athletic Trainers Association ("NATA") published a position statement

regarding concussion management.[14] NATA provided extensive recommendations including that "decisions about an athlete's return to practice should never be based solely on the use of any one test." It also recommended a "cautious clinical judgment" which "takes into account all evaluation options."

49. Specifically, the NATA Position Statement stated:

> Return to participation after severe or repetitive concussive injury should be considered only if the athlete is completely symptom free and has a normal neurologic examination, normal neuropsychological and postural-stability examinations, and, if obtained, normal neuroimaging studies (i.e., MRI with gradient echo). It may not be practical or even possible to use all these assessments in all athletes or young children, but a cautious clinical judgment should take into account all evaluation options. Each injured athlete should be considered individually, with consideration for factors including age, level of participation, nature of the sport (high risk versus low risk), and concussion history. Standardized neuropsychological testing, which typically assesses orientation, immediate and delayed memory recall, and concentration may assist the ATC and physician in determining when to disqualify an athlete from further participation. Balance testing may provide additional information to assist the clinician in the decision-making process of whether to disqualify an individual after a concussion. When to disqualify the athlete is one of the most important decisions facing the ATC and team physician when dealing with an athlete suffering from a concussion. This includes not only when to disqualify for a single practice or event but also when to disqualify for the season or for a career.

50. It further stated:

> The decision to disqualify an individual from further participation on the day of the concussive episode is based on the sideline evaluation, the symptoms the athlete is experiencing, the severity of the apparent symptoms, and the patient's past history. The literature is clear: any episode involving LOC or persistent symptoms related to concussion (headache, dizziness, amnesia, and so on), regardless of how mild and transient, warrants disqualification for the remainder of that day's activities.

[14] K.M. Guskiewicz et al., *National Athletic Trainers' Association Position Statement: Management of Sport-Related Concussion*, 39 J. ATHLETIC TRAINING 280 (2004) ("NATA 2004 Statement").

51. The NATA Position Statement similarly recommended baseline testing; the use of objective concussion assessment tools; a combination of screening tools for the sideline; and implementation of a neuropsychological testing program with evaluations by persons appropriately trained in the test administration and scoring (ideally by a neuropsychologist).

3. 2006 American College of Sports Medicine Concussion Consensus Statement.

52. The American College of Sports Medicine's "Concussion (Mild Traumatic Brain Injury) and the Team Physician: A Consensus Statement" provided that a detailed/systematic plan for the team physician to follow in the evaluation of an individual for concussion on the sideline should be developed; noted that post injury neuropsychological data is more useful if compared to a baseline; a team physician should perform serial neurological assessments as an essential function; that it is desirable that the education of the athlete and others about concussion; and that helmets do not prevent, and may actually increase, the incidence of concussion.[15]

53. Regarding same-day RTP, the consensus statement provided:

> It is ***essential*** the team physician understand:
>
> - There is agreement that athletes with significant, persistent or worsening signs and symptoms (e.g., abnormal neurological examination, ongoing RGA or PTA, prolonged LOC) should not RTP.
>
> - For other athletes with concussion, significant controversy exists for a same-day RTP decision and no conclusive evidence-based data are available. Areas of controversy include:
>
> - Returning an athlete with any symptoms to play.
>
> - Returning an athlete with fully resolved symptoms to play.

[15] American College of Sports Medicine, *Concussion (Mild Traumatic Brain Injury) and the Team Physician: A Consensus Statement*, MED. SCI. SPORTS & EXERCISE, 395, 396 (2006).

- Certain symptoms, even if resolved, are contraindications to same-day RTP (e.g., any LOC, PTA, and RGA).

- The duration and severity of symptoms are the determining factors of RTP.

- It is the safest course of action to hold an athlete out.

54. Regarding post-game-day RTP, the consensus statement provided:

It is ***essential*** the team physician understand:

- Determine the athlete is asymptomatic at rest before resuming any exertional activity.

- Amnesia may be permanent.

- Utilize progressive aerobic and resistance exercise challenge tests before full RTP.

- Consider factors which may affect RTP, including:

- Severity of the current injury.

- Previous concussions (number, severity, proximity).

- Significant injury in response to a minor blow.

- Age (developing brain may react differently to trauma than mature brain).

- Sport.

- Learning disabilities.

- Understand contraindications for return to sport (e.g., abnormal neurological examination, signs or symptoms with exertion, significant abnormalities on cognitive testing or imaging studies).

- Controversy exists for postgame RTP decisions.

It is ***desirable*** the team physician:

- Coordinate a team to implement progressive aerobic and resistance exercise challenge tests before full RTP.

- Recognize challenging cognitive effort may exacerbate symptoms of concussion and retard recovery.

- Discuss status of athlete with parents, caregivers, teachers, certified athletic trainers and coaching staff within disclosure regulations.

- Consider neuropsychological testing.

4. NFL 2007 Return to Play.

55. The first return-to-play/concussion standards in the NFL were adopted in 2007. While the adoption by the NFL of the policy was late and incomplete (and the NFL is now known to have hidden for at least a decade its knowledge of concussion injuries), it nonetheless reflected an important change.

56. The NFL policy stated that a player should not be allowed to return in the same game if a player lost consciousness and also required mandatory baseline testing.[16]

57. The 2007 policy placed an emphasis on taking a conservative approach to managing concussions including "giving full consideration to a player's medical history, including his history of concussions and recovery from any previous concussions, and taking the necessary time to conduct a thorough neurological examination, including mental status at rest and post-exertion before making a decision on returning a player to practice or play."

58. The 2007 policy also mandated baseline testing:[17]

> Neuropsychological baseline testing will be required for all NFL players beginning this season, using a standardized test to establish an individual functional baseline. Neuropsychological testing is one tool a physician can use to assist in the management of MTBI. It cannot be used by itself to make clinical decisions. For players removed from games due to

[16] Press Release, *NFL Outlines Standards for Concussion Management* (May 22, 2007), *available at* http://www.nflevolution.com/wordpress/wp-content/uploads/2012/08/ concussion_standards-508.pdf; NCAA10044661-62. (last accessed November 28, 2014).

[17] Press Release, *NFL Outlines Standards for Concussion Management* (May 22, 2007), *available at* http://www.nflevolution.com/wordpress/wpcontent/uploads/2012/08/ concussion_standards-508.pdf (last accessed November 28, 2014).

> concussions, repeat testing will be done during the season to track recovery and to help decide when they can return to play. These players also will be re-tested against their baseline performance the following season at training camp.

59. Finally, the NFL took some steps to educate players in a 2007 "concussion pamphlet":[18]

> (1) The player should be completely asymptomatic and have normal neurological test results, including mental status testing at rest and after physical exertion before returning to play; (2) Symptoms to be taken into account include confusion, problems with immediate recall, disorientation to time, place and person, anterograde and retrograde amnesia, fatigue, and blurred vision; (3) if an NFL player sustains a loss of consciousness, as determined by the team medical staff, he should not return to the same game or practice; (4) NFL team physicians and athletic trainers will continue to exercise their medical judgment and expertise in treating concussions, including considering any history of concussion in a player.

5. The 2008 Zurich Protocol.

60. The 3rd International Conference on Concussion in Sport was held in Zurich in November 2008, resulting in an update of the Vienna and Prague Protocols ("Zurich Protocol").[19] Once again, the Zurich Protocol reaffirmed the need for a graduated stepwise return-to-play process after a concussion with a 24-hour wait period between each step. The Zurich Protocol mirrors the Prague Protocol in many respects. However, the Zurich Protocol abandoned the simple versus complex terminology developed in Prague and also identified "concussion modifiers" which may affect the recovery and outcome of return-to-play progress. In addition, the Zurich Protocol more specifically enumerated a process for sideline evaluation and developed another standardize concussion assessment tool (SCAT2) for use in concussion evaluation.

[18] *See* Press Release, *NFL Outlines For Players Steps Taken to Address Concussions* (Aug. 14, 2007), *available at* http://www.nfl.com/news/story/09000d5d8017cc67/article/nfl-outlines-for-players-steps-taken-to-address-concussions (last accessed November 28, 2014).

[19] Zurich Protocol, at i78.

61. With respect to return to play, the Zurich Protocol noted:

> The cornerstone of concussion management is physical and cognitive rest until symptoms resolve and then a graded programme of exertion prior to medical clearance and return to play. The recovery and outcome of this injury may be modified by a number of factors that may require more sophisticated management strategies. These are outlined in the section on modifiers below. As described above, the majority of injuries will recover spontaneously over several days. In these situations, it is expected that an athlete will proceed progressively through a stepwise return to play strategy. During this period of recovery while symptomatic, following an injury, it is important to emphasise to the athlete that physical and cognitive rest is required. Activities that require concentration and attention (eg, scholastic work, videogames, text messaging, etc) may exacerbate symptoms and possibly delay recovery. In such cases, apart from limiting relevant physical and cognitive activities (and other risktaking opportunities for re-injury) while symptomatic, no further intervention is required during the period of recovery and the athlete typically resumes sport without further problem.

62. The Protocol further stated:

> Return to play protocol following a concussion follows a stepwise process … With this stepwise progression, the athlete should continue to proceed to the next level if asymptomatic at the current level. Generally each step should take 24 hours so that an athlete would take approximately one week to proceed through the full rehabilitation protocol once they are asymptomatic at rest and with provocative exercise. If any postconcussion symptoms occur while in the stepwise programme, the patient should drop back to the previous asymptomatic level and try to progress again after a further 24-hour period of rest has passed."

63. The Protocol included the following chart:

> Graduated Return-to-Play Protocol:

Rehabilitation stage	Functional exercise at each stage of rehabilitation	Objective of each stage
1. No activity	Complete physical and cognitive rest	Recovery
2. Light aerobic exercise	Walking, swimming or stationary cycling keeping intensity <70% maximum predicted heart rate No resistance training	Increase heart rate
3. Sport-specific exercise	Skating drills in ice hockey, running drills in soccer. No head impact activities	Add movement
4. Non-contact training drills	Progression to more complex training drills, eg passing drills in football and ice hockey May start progressive resistance training)	Exercise, coordination, and cognitive load
5. Full contact practice	Following medical clearance participate in normal training activities	Restore confidence and assess functional skills by coaching staff
6. Return to play	Normal game play	

64. The Zurich Protocol provided: "An important consideration in RTP is that concussed athletes should not only be symptom-free but also should not be taking any pharmacological agents/medications that may mask or modify the symptoms of concussion."

65. In regards to "Same day RTP," the Protocol stated:

> With adult athletes, in some settings, where there are team physicians experienced in concussion management and sufficient resources (eg, access to neuropsychologists, consultants, neuroimaging, etc) as well as access to immediate (ie, sideline) neurocognitive assessment, return to play management may be more rapid. The RTP strategy must still follow the same basic management principles namely full clinical and cognitive recovery before consideration of return to play. This approach is supported by published guidelines, such as the American Academy of Neurology, US Team Physician Consensus Statement, and US National Athletic Trainers Association Position Statement. This issue was extensively discussed by the consensus panelists and it was acknowledged that there is evidence that some professional American football players are able to RTP more quickly, with even same day RTP supported by National Football League studies without a risk of recurrence or sequelae. *There are data however, demonstrating that at the collegiate and high school level, athletes allowed to RTP on the same day may demonstrate NP deficits post-injury that may not be evident on the sidelines and are more likely to have delayed onset of symptoms.* It should be emphasised however, that the young (<18) elite athlete should be treated more conservatively even though the resource may be the same as for an older professional athlete. [Emphasis added.]

66. The Protocol also noted that the panel agreed that a range of "modifying factors" may effect concussion management: "[A] range of 'modifying' factors may influence the investigation and management of concussion and in some cases, may predict the potential for prolonged or persistent symptoms." These modifiers are depicted in the following chart:

Factors	Modifier
Symptoms	Number
	Duration (>10 days)
	Severity
Signs	Prolonged loss of consciousness (>1 min), amnesia
Sequelae	Concussive convulsions
Temporal	Frequency—repeated concussions over time
	Timing—injuries close together in time
	"Recency"—recent concussion or traumatic brain injury
Threshold	Repeated concussions occurring with progressively less impact force or slower recovery after each successive concussion
Age	Child and adolescent (<18 years old)
Co- and pre-morbidities	Migraine, depression or other mental health disorders, attention deficit hyperactivity disorder, learning disabilities, sleep disorders
Medication	Psychoactive drugs, anticoagulants
Behaviour	Dangerous style of play
Sport	High risk activity, contact and collision sport, high sporting level

67. The Zurich Protocol also re-emphasized the importance of neuropsychological and comparative baseline testing but noted that it should not be used as a stand-alone tool or form the sole basis of management decisions but rather as an aid to the clinical decision making process. In addition, the Zurich Protocol noted that "neurospychologists are in the best position to interpret NP tests by virtue of their background and training … However, there may be situations where neuropsychologists are not available and other medical professional may perform or interpret NP screening tests." The Zurich Protocol recommended that all high-risk sports have formal baseline neuropsychological screening, stating "[a]lthough formal baseline NP screening may be beyond the resources of many sports or individuals, it is recommended that

in all organised high risk sports consideration be given to having this cognitive evaluation regardless of the age or level of performance." Finally, the Zurich Protocol noted that: "in the absence of NP and other testing, more conservative return to play approach may be appropriate."

68. The Zurich Protocol also expanded upon the sideline evaluation of concussion and formulated the SCAT2. The Zurich Protocol specifically stated:

> When a player shows ***any*** features of a concussion:
>
> a. The player should be medically evaluated onsite using standard emergency management principles and particular attention should be given to excluding a cervical spine injury.
>
> b. The appropriate disposition of the player must be determined by the treating healthcare provider in a timely manner. If no healthcare provider is available, the player should be safely removed from practice or play and urgent referral to a physician arranged.
>
> c. Once the first aid issues are addressed, then an assessment of the concussive injury should be made using the SCAT2 or other similar tool.
>
> d. The player should not be left alone following the injury and serial monitoring for deterioration is essential over the initial few hours following injury.
>
> e. A player with diagnosed concussion should not be allowed to return to play on the day of injury. Occasionally in adult athletes, there may be return to play on the same day as the injury.
>
> Sideline evaluation of cognitive function is an essential component in the assessment of this injury. Brief neuropsychological test batteries that assess attention and memory function have been shown to be practical and effective. Such tests include the Maddocks questions and the Standardized Assessment of Concussion (SAC). It is worth noting that standard orientation questions (eg, time, place, person) have been shown to be unreliable in the sporting situation when compared with memory assessment. It is recognised, however, that abbreviated testing paradigms

> are designed for rapid concussion screening on the sidelines and are not meant to replace comprehensive neuropsychological testing which is sensitive to detect subtle deficits that may exist beyond the acute episode; nor should they be used as a stand-alone tool for the ongoing management of sports concussions. It should also be recognised that the appearance of symptoms might be delayed several hours following a concussive episode.

(Internal citations omitted.)

69. The Zurich Protocol again emphasized the necessity of concussion education. "As the ability to treat or reduce the effects of concussive injury after the event is minimal, education of athletes, colleagues and the general public is a mainstay of progress in this field. Athletes, referees, administrators, parents, coaches and healthcare providers must be educated regarding the detection of concussion, its clinical features, assessment techniques and principles of safe return to play."

70. Finally, the Zurich Protocol noted that there is no evidence that protective equipment, including helmets, will prevent concussion. "There is no good clinical evidence that currently available protective equipment will prevent concussion although mouthguards have a definite role in preventing dental and or facial injury. Biomechanical studies have shown a reduction in impact forces to the brain with the use of head gear and helmets, but these findings have not been translated to show a reduction in concussion incidence."

6. In 2009, The NFL Adopts A Stricter Statement on Return to Play Following Concussions.

71. In 2009, the NFL's medical committee on concussions, in conjunction with team doctors, outside medical experts, and the NFL Players Association, adopted stricter standards of return-to-play decisions after concussions.[20]

[20] *See* Press Release, *NFL Adopts Stricter Statement on Return-to-Play Following Concussions* (Dec. 2, 2009), *available at* http://www.nflevolution.com/wordpress/wp-content/uploads/2012/08/nfl_adopts_stricter_statement_on_return-to-play_following_concussions-508.pdf; *see also* NCAA10044661-62 (last accessed November 28, 2014).

72. The 2009 standards provided that a player who suffers a concussion should not return to play or practice on the same day if he shows any signs or symptoms of a concussion. The statement mandates:

> Once removed for the duration of the practice or game, the player should not be considered for return-to-football activities until he is fully asymptomatic, both at rest and after exertion, has a normal neurological examination, normal neuropsychological testing, and has been cleared to return both by his team physician(s) and the independent neurological consultant. These independent consultants have been approved by both the NFL Medical Advisor and the Medical Director of the NFL Players Association.
>
> A critical element of managing concussions is candid reporting by players of their symptoms following an injury. Accordingly, players are to be encouraged to be candid with team medical staffs and fully disclose any signs or symptoms that may be associated with a concussion.

73. The 2009 NFL standards stated that a player who suffers a concussion should not return to play or practice on the same day if any of the following symptoms are identified based on the initial medical evaluation of the player:

- Loss of consciousness;
- Confusion as evidenced by disorientation to person, time or place; inability to respond appropriately to questions; or inability to remember assignments or plays;
- Amnesia as evidenced by a gap in memory for events occurring just prior to the injury inability to learn and retain new information; or a gap in memory for events that occurred after the injury;
- Abnormal neurological examination, such as abnormal pupillary response, persistent dizziness or vertigo, or abnormal balance on sideline testing;
- New and persistent headache, particularly if accompanied by photosensitivity, nausea, vomiting or dizziness; and
- Any other persistent signs or symptoms of concussion.

7. In 2011, the NFL Implemented a Standardized Concussion Assessment Protocol.

74. In 2011, the NFL implemented standardized sideline concussion tests to be administered to injured athletes called the "NFL Sideline Concussion Assessment Protocol" and also a standardized baseline test.

75. The sideline protocol was apparently a result of a survey of team medical staffs and input from the players union and mirrors many aspects of the 2008 Zurich SCAT2 protocol. Notably, the NFL protocol was developed by its Head, Neck and Spine Committee, and specifically the return-to-play subcommittee which is chaired by Dr. Margot Putukian, who also consults to the NCAA.[21]

76. First, players must take a baseline test prior to the season. Once a player is injured, players must be evaluated with a standardized test "derived from the Standardized Concussion Assessment Tool 2 (SCAT2) and represents a standardized method of evaluating NFL players for concussion consistent with the reasonable, objective practice of the healthcare profession." The protocol states that "If ANY significant abnormality is found, a conservative, 'safety first' approach should be adopted. An athlete suspected of sustaining a concussion is a 'No Go' and does not return to play in the same game or practice." Moreover, the comparison is being done real-time in the NFL using iPad apps.[22]

77. The NFL explained: "The hope is that being able to compare the results of a baseline test and post-injury test side by side in real time will speed diagnosis and help doctors and trainers recognize when a player should be removed from a game. The league also plans to

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[21] *NFL Launches New Guidelines for Assessing Concussions*, USA TODAY (Mar. 30, 2011), *available at* http://usatoday30.usatoday.com/sports/football/nfl/2011-03-29-concussionsprotocol_N.htm (last accessed November 28, 2014).

[22] Judy Battista, *NFL Will Expand Concussion Efforts During Games*, N.Y. TIMES (Feb. 26, 2013), *available at* http://www.nytimes.com/2013/02/27/sports/football/nfl-will-use-ipads-toexpand-in-game-concussion-testing.html?ref=judybattista&_r=0 (last accessed November 28, 2014).

have independent neurological consultants on the sideline during each game to assist the team physician in diagnosing and treating players."[23]

8. American College of Sports Medicine's Concussion (Mild Traumatic Brain Injury) and the Team Physician: A Consensus Statement – 2011 Update.

78. The 2011 Update by the American College of Sports Medicine revised recommendations regarding mild traumatic brain injury from the 2006 edition.[24] The 2011 Update provided:

- No same day return-to play (RTP).
- Neurological examination emphasizing cognitive function and balance.
- Role and limitations of neuropsychological (NP) testing.
- Utility of standardized baseline and post injury assessments.
- Importance of preseason planning.
- Acknowledged importance of cognitive rest.
- Acknowledged emerging technologies and their role in concussion research.
- Recognition of long-term complications of concussion.
- Legislation and governing body regulations for concussion.

79. In addition, the 2011 Update provided:

It is ***essential*** the team physician understand:

- Before resuming exercise, the athlete must be asymptomatic or returned to baseline symptoms at rest and has no symptoms with cognitive effort.

[23] *Id.*

[24] American College of Sports Medicine, *Concussion (Mild Traumatic Brain Injury) and the Team Physician: A Consensus Statement - 2011 Update*, MED. SCI. SPORTS & EXERCISE 2412, 2415 (2011).

- Amnesia surrounding the event may be permanent.

- An athlete should no longer be taking medications that may mask or modify concussion symptoms.

- The athlete's clinical neurological examination (cognitive, cranial nerve, and balance testing) have returned to baseline before resuming exercise.

- If performed, NP testing returns to at-least baseline before resuming contact/collision activities.

- Progressive aerobic and resistance exercise challenge tests should be utilized before full RTP

    - This process may take days, weeks, or months.

    - Recurrence of symptoms and/or signs warrants additional rest and monitoring.

- Certain risk factors may affect RTP decision making.

- Additional factors may affect RTP decision making:

    - Risk-taking behaviors.

    - Type of sport.

It is ***desirable*** the team physician:

- Coordinate a team to implement sport-specific progressive aerobic and resistance exercise challenge tests before full RTP.

- Facilitate academic accommodations for symptomatic student athletes.

- Discuss status of athlete with parents/guardians, caregivers, certified athletic trainers, coaches, school officials, and others within disclosure regulations. [Internal citations omitted; emphasis in original.]

80. The ACSM also published a 2012 Update.[25] Regarding "Establishing Return to Play Process," the 2012 Update states:

> Establishing a process for returning an athlete to play is the essential first step in deciding when an injured or ill athlete may safely return to practice or competition. This process should include evaluation of the athlete's health status, participation risk, and extrinsic factors. The final RTP decision is made by the team physician.
>
> It is ***essential*** the team physician:
>
> - Understand the RTP process should be established during the off season.
> - Coordinate a chain of command regarding decisions to return an injured or ill athlete to practice or competition.
> - Evaluate the athlete's health status.
> - Medical factors including history, symptoms, signs, and additional tests.
> - Psychological factors, including readiness and coping mechanisms.
> - Functional testing to evaluate readiness to RTP.
> - Nature of the illness/injury including mechanism of injury, natural history, and known risks of participating after illness/injury.
> - Evaluate the athlete's participation risk.
> - Demands of the athlete's sport, including the position and competitive level of play.
>
> - Role of taping, bracing, or orthoses to protect the athlete.
> - Role of medical interventions that allow an athlete to play (e.g., analgesics/injections, inhalers, and intravenous fluids).

[25] American College of Sports Medicine, *The Team Physician and the Return-to-Play Decision: A Consensus Statement – 2012 Update*, MED. SCI. SPORTS & EXERCISE 2446, 2447 (2012).

- RTP may affect other athletes (e.g., bracing, casting, and disease transmission).

- Understand extrinsic factors that may modify the acceptable level of risk (risk/gain ratio) for the individual athlete (e.g., pressure from parents, team and/or coaches, conflicts of interest and other ethical considerations, fear of litigation, point in athlete's season, or career).

- Communicate the RTP process to players, families, certified athletic trainers, coaches, administrators, and other health care providers.

- Confirm a system for medical documentation is in place.

- Establish protocols within disclosure regulations for the release of information regarding an athlete's ability to return to practice or competition after an injury or illness.

- Understand certain sports have governing body rules and regulations regarding participation that affect the RTP decision (e.g., no knee brace in rugby and skin infection in wrestling).

- Understand federal, state, and local regulations and legislation related to returning an injured or ill athlete to practice or competition.

It is ***desirable*** the team physician:

- Work with the athletic care network to educate athletes, parents, and coaches about the RTP process.

- Prepare a letter of understanding between the team physician and the administration that defines the authority, responsibilities, and RTP decisions." [Internal citations omitted.]

9. 2013 American Academy of Neurology Update.

81. On March 18, 2013, the American Academy of Neurology ("AAN") replaced its 1997 practice parameter regarding sports concussion with the *Summary of Evidence-Based Guideline Update: Evaluation and Management of Concussion in Sports* ("AAN Update").[26]

[26] American Academy of Neurology, *Summary of Evidence-Based Guideline Update: Evaluation and Management of Concussion in Sports* (2013), *available at* http://neurology.org/

82. The AAN Update recommended the following diagnostic tools as useful in identifying those with concussion: Post-Concussion Symptom Scale or Graded Symptom Checklist; Standardized Assessment of Concussion; neuropsychological testing; Balance Error Scoring System; Sensory Organization Test; and these diagnostic measures used in combination.[27] With respect to neuropsychological testing, the AAN stated that such testing:

> generally require[s] a neuropsychologist for accurate interpretation, although [it] may be administered by a non-neuropsychologist. It is likely that neuropsychological testing of memory performance, reaction time, and speed of cognitive processing, regardless of whether administered by paper-and-pencil or computerized method, is useful in identifying the presence of concussion.[28]

The AAN further stated that the above diagnostic tools may be used to identify athletes with "chronic neurobehavioral impairments."[29]

83. The AAN also provided three sets of recommendations, regarding: (1) pre-participation counseling; (2) the assessment, diagnosis, and management of suspected concussion; and (3) the management of diagnosed concussion (including acute management, RTP, and retirement).[30]

84. First, with respect to pre-participation counseling, the AAN recommended that "school-based professionals be educated by experienced LHCPs [licensed healthcare providers] designated by their organization/institution to understand the risks of experiencing a concussion so that they may provide accurate information to parents and athletes."[31]

85. Second, with respect to the management of diagnosed concussion, the AAN Update addressed RTP and the risk of recurrent concussion, and provided:

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content/early/2013/03/15WNL.0b013e31828d57dd.

[27] *Id.* at 3.

[28] *Id.* (citations omitted).

[29] *Id.*

[30] *Id.* at 4.

[31] *Id.*

1) In order to diminish the risk of recurrent injury, individuals supervising athletes should prohibit an athlete with concussion from returning to play/practice (contact-risk activity) until an LHCP has judged that the concussion has resolved.

2) In order to diminish the risk of recurrent injury, individuals supervising athletes should prohibit an athlete with concussion from returning to play/practice (contact-risk activity) until the athlete is asymptomatic off medication.[32]

86. The AAN also recommended "cognitive restructuring counseling" consisting of "education, reassurance, and reattribution of symptoms," which has been shown to decrease the proportion of individuals with mTBI who develop chronic postconcussion syndrome.[33]

87. Finally, the AAN stated that LHCPs "should counsel athletes with a history of multiple concussions and subjective persistent neurobehavioral impairment about the risk factors for developing permanent or lasting neurobehavioral or cognitive impairments."[34]

10. 2013 Zurich II Protocol.

88. The 4th International Conference on Concussion in Sport was held in Zurich in November 2012, resulting in an update of the Vienna, Prague and Zurich Protocols ("Zurich II").[35] Zurich II provided only modest updates to the prior consensus guidelines.

89. With respect to pre-participation concussion management, Zurich II stated: [36]

> Recognising the importance of a concussion history, and appreciating the fact that many athletes will not recognise all the concussions they may have suffered in the past, a detailed concussion history is of value. Such a history may preidentify athletes who fit into a high-risk category and provides an opportunity for the healthcare provider to educate the athlete in regard to the significance of concussive injury. A structured concussion

[32] *Id.* at 5.
[33] *Id.*
[34] *Id.* at 6.
[35] P. McCrory et al., *Consensus statement on concussion in sport: the 4th International Conference on Concussion in Sport held in Zurich, November 2012*, 47 BRIT. J. SPORTS MED. 250 (2013), *available at* http://bjsm.bmj.com/content/47/5/250.full.pdf+html. ("Zurich II Protocol") (last accessed November 28, 2014).
[36] *Id.*

> history should include specific questions as to previous symptoms of a concussion and length of recovery; not just the perceived number of past concussions. It is also worth noting that dependence on the recall of concussive injuries by teammates or coaches has been demonstrated to be unreliable.
>
> The clinical history should also include information about all previous head, face or cervical spine injuries as these may also have clinical relevance. It is worth emphasising that in the setting of maxillofacial and cervical spine injuries, coexistent concussive injuries may be missed unless specifically assessed. Questions pertaining to disproportionate impact versus symptom severity matching may alert the clinician to a progressively increasing vulnerability to injury. As part of the clinical history, it is advised that details regarding protective equipment employed at the time of injury be sought, both for recent and remote injuries.
>
> There is an additional and often unrecognised benefit of the preparticipation physical examination insofar as the evaluation allows for an educative opportunity with the player concerned as well as consideration of modification of playing behaviour if required.

90. Zurich II also emphasized the necessity of concussion education before a concussion has occurred, stating:[37]

> As the ability to treat or reduce the effects of concussive injury after the event is minimal, education of athletes, colleagues and the general public is a mainstay of progress in this field. Athletes, referees, administrators, parents, coaches and healthcare providers must be educated regarding the detection of concussion, its clinical features, assessment techniques and principles of safe return to play.

91. In regards to "Same day RTP" after a concussion, Zurich II again reinforced:[38]

> It was unanimously agreed that no RTP on the day of concussive injury should occur. There are data demonstrating that at the collegiate and high school levels, athletes allowed to RTP on the same day may demonstrate NP deficits postinjury that may not be evident on the sidelines and are more likely to have delayed onset of symptoms.

[37] *Id.* at 5.
[38] *Id.* at 3.

92. With respect to return to play, Zurich II stated: "The cornerstone of concussion management is physical and cognitive rest until symptoms resolve and then a graded programme of exertion prior to medical clearance and return to play."[39] Zurich II further stated:[40]

> Return to play protocol following a concussion follows a stepwise process … With this stepwise progression, the athlete should continue to proceed to the next level if asymptomatic at the current level. Generally, each step should take 24 h so that an athlete would take approximately one week to proceed through the full rehabilitation protocol once they are asymptomatic at rest and with provocative exercise. If any postconcussion symptoms occur while in the stepwise programme, then the patient should drop back to the previous asymptomatic level and try to progress again after a further 24 h period of rest has passed.

Zurich II included the following chart for Graduated Return-to-Play Protocol:[41]

Rehabilitation stage	Functional exercise at each stage of rehabilitation	Objective of each stage
1. No activity	Symptom limited physical and cognitive rest	Recovery
2. Light aerobic exercise	Walking, swimming or stationary cycling keeping intensity <70% maximum permitted heart rate No resistance training	Increase HR
3. Sport-specific exercise	Skating drills in ice hockey, running drills in soccer. No head impact activities	Add movement
4. Non-contact training drills	Progression to more complex training drills, eg, passing drills in football and ice hockey May start progressive resistance training	Exercise, coordination and cognitive load
5. Full-contact practice	Following medical clearance participate in normal training activities	Restore confidence and assess functional skills by coaching staff
6. Return to play	Normal game play	

[39] *Id.*
[40] *Id.*
[41] *Id.* at 4.

93. Zurich II explained that a single return-to-play paradigm should be used for all athletes and that formal neuropsychological testing should be used in high risks sports regardless of age or level of competition, explaining:[42]

> All athletes regardless of level of participation should be managed using the same treatment and return to play paradigm. The available resources and expertise in concussion evaluation are of more importance in determining management than a separation between elite and non-elite athlete management. Although formal NP testing may be beyond the resources of many sports of individuals, it is recommended that, in all organised high-risk sports, consideration be given to having this cognitive evaluation, regardless of the age or level of performance.

94. Zurich II also re-emphasized the importance of neuropsychological testing but noted that it should not be used as a stand-alone tool or form the sole basis of management decisions but rather as an aid to the clinical decision making process. In addition, Zurich II recommended that "all athletes should have a clinical neurological assessment (including assessment of their cognitive function) as part of their overall management," and that NP testing should ideally be performed by trained neuropsychologists who are "in the best position to interpret NP tests by virtue of their background and training…."[43] Zurich II recommended that all high-risk sports, regardless of the age or level of performance, have formal baseline neuropsychological screening.[44]

95. In regards to sideline assessments, Zurich II requires "sufficient time for assessment … in some sports, this may require rule change to allow an appropriate off field medical assessment to occur without affecting the flow of the game or unduly penalizing the injured player's team."[45]

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[42] *Id.* at 5.
[43] *Id.* at 7-8.
[44] *Id.* at 5.
[45] *Id.* at 2.

96. Finally, Zurich II states specific recommendations regarding child and adolescent athletes:

> The evaluation and management recommendations contained herein can be applied to children and adolescents down to the age of 13 years. Below that age, children report concussion symptoms different from adults and would require age-appropriate symptom checklists as a component of assessment. An additional consideration in assessing the child or adolescent athlete with a concussion is that the clinical evaluation by the healthcare professional may need to include both patient and parent input, and possibly teacher and school input when appropriate. A child SCAT3 has been developed to assess concussion (see appendix) for individuals aged 5–12 years.
>
> It was agreed by the panel that no return to sport or activity should occur before the child/adolescent athlete has managed to return to school successfully. In addition, the concept of 'cognitive rest' was highlighted with special reference to a child's need to limit exertion with activities of daily living that may exacerbate symptoms. School attendance and activities may also need to be modified to avoid provocation of symptoms. Children should not be returned to sport until clinically completely symptom-free, which may require a longer time frame than for adults.
>
> Because of the different physiological response and longer recovery after concussion and specific risks (eg, diffuse cerebral swelling) related to head impact during childhood and adolescence, a more conservative RTP approach is recommended. ***It is appropriate to extend the amount of time and adolescents***. It is not appropriate for a child or adolescent athlete with concussion to RTP on the same day as the injury, regardless of the level of athletic performance. Concussion modifiers apply even more to this population than adults and may mandate more cautious RTP advice.[46]

97. The documents set forth above constitute the consensus best practices in the proper assessment and management of concussion for all physician, sub-specialty, and allied health professionals, including athletic trainers and those responsible for the safety, well-being and treatment of athletes.

[46] *Id.* at 5 (emphasis added).

V. THE IHSA'S CULPABILITY

A. IHSA Has A Duty To Protect Illinois Student-Athletes.

98. Illinois High School Football is regulated by the IHSA. The IHSA's Constitution states that the IHSA's objectives include "supervis[ing] and regulat[ing] all of the interscholastic activities in which its member schools may engage."[47]

99. The IHSA also demands that its member schools "must comply with the rules as stipulated in the Constitution and By-Laws" and that "All interscholastic athletic games, meets and contests participated in by IHSA member schools shall be governed only by rules written or officially adopted for those respective sports by the National Federation of State High School Association and modified by the IHSA."[48]

100. IHSA enforces this by mandating that each member schools' Principal be accountable to the IHSA.[49] These policies give IHSA complete control over how its member institutions handle interscholastic activities.

101. By adopting policies regarding concussions (as further detailed below), IHSA clearly intended its authority over its member institutions to extend to concussion management and determining when athletes could return to play after suffering an actual or suspected head or brain injury.

102. The IHSA Constitution has no principle of institutional control. Instead, its role is, as stated above, one of direct supervision and regulation of the interscholastic activities in which its member schools engage.

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[47] IHSA Const. § 1.130 (available at http://www.ihsa.org/AbouttheIHSA/ConstitutionBylawsPolicies.aspx).

[48] *Id*. at § 2.010.

[49] *Id*. at § 2.020.

103. As a result, if IHSA's concussion management policies (and lack thereof) systematically fail, the IHSA is liable, at least in part, for any harm caused by its policies.

B. Passage of the "Protecting Our Student Athletes" Act in Illinois.

104. IHSA's Constitution and bylaws detail numerous regulations on a wide-range of matters that include academic eligibility, all-star teams, and even what to do when student-athletes participate in events under assumed names. However, regulations on player safety are scant.

105. This changed only slightly on July 28, 2011, when Illinois adopted the Protecting Our Student Athletes Act.[50] The Act:

- Requires that youth athletes and their parents and guardians are informed and educated on concussions;
- Mandates the removal of an athlete who appears to have suffered a concussion during a game or practice;
- Requires a youth athlete to be cleared by a licensed health care professional trained in the evaluation and management of concussion before returning to play in a game or practice.

106. Unlike many other similar laws around the country intended to handle the issue of protecting youth athletes from concussions, however, the Act does not mandate specific guidelines or rules on managing student-athlete concussions and head injuries.

107. Instead, the Act requires individual school boards to pass policies that comply with the Illinois High School Association "protocols, policies, and by-laws" regarding "student-athlete concussions and head injuries."

108. Thus, ***the Act made the IHSA solely responsible for promulgating the rules that would minimize the risk of concussions in Illinois' student-athletes***.

[50] 105 ILCS 5/10-20.54.

C. Specific Deficiencies In The IHSA Policies Both Before And After Passage Of The Illinois Act.

1. IHSA's Flawed Concussion Protocol.

109. Pursuant to the Act, the IHSA adopted its "IHSA Protocol for Implementation of NFHS Sports Playing Rule for Concussions" (the "Protocol").

110. The Protocol states:

> Any athlete who exhibits signs, symptoms, or behaviors consistent with a concussion (such as loss of consciousness, headache, dizziness, confusion, or balance problems) shall be immediately removed from the contest and shall not return to play until cleared by an appropriate health care professional.

111. As the text of the Protocol demonstrates, removing athletes that appear to have suffered a concussion is mandatory, and clearance from a licensed health care professional before allowing an athlete to return to play after demonstrating concussion-like symptoms is required.[51]

112. However, the Protocol only calls for immediately removing "from the ***contest***" any athlete "who exhibits signs, symptoms, or behaviors consistent with a concussion."[52] [53] The Protocol does not, by its terms, regulate concussions, and suspected concussions, that occur during ***practice***.

113. In a note accompanying the Protocol, the IHSA points out that "officials [are] to be cognizant of athletes who display signs symptoms, or behaviors of a concussion." Here again, the Protocol never mentions "coaches" or "practice."

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[51] *IHSA Protocol for Implementation of NFHS Sports Playing Rule for Concussions*, 2013-14 BOYS FOOTBALL MANUAL FOR SCHOOLS AND MANAGERS, at 13 (available at http://www.ihsa.org/sportsactivities/boysfootball.aspx) (last visited November 28. 2014).

[52] *Id*.

[53] IHSA Const. Definitions "Contest is defined by the IHSA's Constitution as "Any interscholastic competition, including a scrimmage, in which students representing two or more high schools participate with or against each other."

114. By contrast, IHSA's Return to Play policy (RTP) expressly ***includes practice*** by demanding that "no athlete shall return to play *or practice* until…receiv[ing] written clearance…."[54] (emphasis added). However, this policy only governs when athletes may return to play after exhibiting the symptoms of a concussion. It does not cover the identification of athletes exhibiting concussion-like symptoms.

115. Thus, there is a lapse between IHSA's concussion Protocol and its RTP that leaves concussions at practice unregulated by anything but the RTP, which only protects players who were identified as concussed *before* any given practice.

116. As a result, during IHSA football practices, coaches are left completely to their own discretion to decide which players are medically fit to play and which ones are not.

117. This is especially problematic because until August 19, 2014, when Governor Pat Quinn signed into effect 105 ILCS 25/1.15,[55] the IHSA had never before required coaches to go through any official training or education regarding the identification and management of concussions.

118. These dangers are amplified by the absence of medical professionals (such as EMTs) at practices, compared to their usual presence "at a contest."

119. Moreover, until the Illinois Legislature stepped in and took action in 2011 with the passage of 105 ILCS 5/10-20.54 and in 2014 with the passing of 105 ILCS 25/1.15, IHSA failed to institute any policies that required a concussed player to sit out the remainder of activity on the day the player is concussed, and that no player can return to play until all symptoms have cleared and recovery has occurred as determined by a trained health professional.

[54] *Id*. at 14.
[55] Public Act 098-1011.

2. Medical Personnel Present At Contact Sports Games and *Available* For Contact Sport Practices.

120. Though IHSA requires medical personnel to be present during football games, it does not necessarily require personnel with specific expertise in concussion diagnosis, treatment, and management.

121. IHSA also has no requirement that any medical personnel be at least ***available***, if not present, for football practices.

122. Such measures would provide immediate benefit to concussed athletes and to athletes who display concussion-like symptoms on the field but may not otherwise receive medical attention absent the presence of medical personnel with training in the diagnosis, treatment and management of concussions.

3. IHSA's Failure to Implement Baseline Testing.

123. To this day, the IHSA has also failed to implement one of the best-known tools for minimizing the risk of concussions: baseline testing.

124. Baseline testing is an annual or bi-annual pre-season exam that tests an athlete's balance and brain function. An athlete's base results from the pre-season exam are then used to compare the results of a similar exam performed when the athlete is suspected to have suffered from a concussion.[56]

125. Athletes are then not allowed to return to the playing field until their balance and cognitive function have returned to their initial baseline that was established during the pre-season.

[56] CENTERS FOR DISEASE CONTROL AND PREVENTION, *Injury Prevention & Control: Traumatic Bran Injury; FAQs about Baseline Testing Among Youth Athletes*, (available at http://www.cdc.gov/concussion/sports/baseline_test.html).

126. Baseline testing is a cornerstone of appropriate concussion management.[57] Indeed, if IHSA's Protocol and RTP are to have any real value, baseline testing is *essential*.

127. Otherwise, the medical professionals clearing players to return to the playing field can never be fully confident that that athlete's cognitive functions have actually returned to their appropriate individualized baseline levels.

128. The glaring absence of such baseline testing assessment tools leaves student-athletes at increased risk for multiple concussive impacts and, thus, SIS.

4. IHSA'S Failure To Track Concussion Occurrence.

129. To this day, IHSA has also failed to implement any requirements for its member schools to report and track concussions.

130. Proper concussion tracking and reporting would enable the IHSA to receive complete information on both a systemic and individual basis to identify problems in the way football is played, as well as the way concussions are handled, and ensure consensus best practices in concussion management are followed.

5. Concussion Education.

131. IHSA's Concussion education measures, required by 105 ILCS 5/10-20.54 and 105 ILCS 25/1.15, make no mention of concussion education techniques for athletic trainers.

132. While the above-mentioned laws have mandated concussion education for coaches, athletes, and parents, mandated education for *trainers* working with IHSA football teams is conspicuously absent.

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[57] *Summary and Agreement Statement of First International Conference on Concussion in Sport, Vienna 2001*, BRIT. J. SPORTS MED, Feb. 2002 ("*Aubry et al*")) (The Vienna Protocol was created by doctors, therapists, health care professionals, coaches, and others involved in the care of injured athletes as a means to minimize concussions. The Vienna Protocol views Baseline Testing as an essential tool for minimizing the risk of concussions.)

6. Academic Accommodations.

133. IHSA has also failed to take any measures for educating teachers and other school personnel on how to implement recommendations from the doctors of concussed athletes and on how to identify concussed athletes.

134. Educating school faculty is an important step that will help provide concussed athletes with the cognitive rest necessary for recovery, as well as reduce the punitive consequences of missed schoolwork, short-term memory deficits that impact test-taking, and other obstacles to success in the classroom as a result of concussions. Such measures will also aid the identification of concussed athletes.

D. Discovery of the Cause of Action, IHSA's Fraudulent Concealment, and the Vulnerability of Plaintiff and the Class.

135. Even today, by failing to implement appropriate policies to prevent, manage, mitigate, and remedy head injuries and concussions sustained by athletes, the IHSA continues to ignore and actively conceal the repeated warnings and patterns of injury of which the IHSA has actual knowledge.

136. Although the debilitating effects of concussions and other head injuries have already manifested for many former student-athletes, there are many others who have sustained such injuries as a direct result of IHSA's failures and inactivity described above, but whose symptoms have only partially manifested or not yet manifested at all.

137. IHSA has failed to establish a proper and adequate methodology to monitor and detect when players suffer concussive or sub-concussive injury in practice or game play. This has increased the risk of injury that will materialize in the future.

138. As a result, Plaintiff and the Class require medical monitoring to detect the manifestation of post-injury symptoms.

VI. CLASS ACTION ALLEGATIONS

139. Plaintiff brings this action on behalf of himself and all other similarly situated individuals and seeks certification of the following class:

> All current or former football players (or, as applicable, that player's legal guardian) who from 2002 to the present competed for a member school of the Illinois High School Association.

Excluded from the Class are the IHSA and its subsidiaries and affiliates; all persons who make a timely election to be excluded from the Class; governmental entities; and the judge to whom this case is assigned and any immediate family members thereof.

140. Certification of Plaintiff's claims for class-wide treatment is appropriate because Plaintiff can prove the elements of his claims on a class-wide basis using the same evidence as would be used to prove those elements in individual actions alleging the same claims.

141. **Numerosity – 735 ILCS 5/2-801(1).** The members of the Class are so numerous that individual joinder of all Class members is impracticable. On information and belief, there are thousands of consumers who have been damaged by Defendant's wrongful conduct as alleged herein. The precise number of Class members and their addresses is presently unknown to Plaintiff, but may be ascertained from Defendant's Member Schools' books and records. Class members may be notified of the pendency of this action by recognized, Court-approved notice dissemination methods, which may include U.S. mail, electronic mail, Internet postings, and/or published notice.

142. **Commonality and Predominance – 735 ILCS 5/2-801(2).** This action involves common questions of law and fact, which predominate over any questions affecting individual members of the Class, including, without limitation:

a. whether the IHSA engaged in the conduct as alleged herein; and

b. whether Plaintiff and the Class are entitled to equitable relief, including, but not limited to, medical monitoring and other injunctive relief.

143. **Adequacy of Representation – 735 ILCS 5/2-801(3).** Plaintiff is an adequate representative of the Class because his interests do not conflict with the interests of the members of the Class he seeks to represent; he has retained counsel competent and experienced in complex commercial and class action litigation; and Plaintiff intends to prosecute this action vigorously. The interests of the Class will be fairly and adequately protected by Plaintiff and his counsel.

144. **Superiority – 735 ILCS 5/2-801(4).** A class action is superior to any other available means for the fair and efficient adjudication of this controversy, and no unusual difficulties are likely to be encountered in the management of this class action. The damages or other financial detriment suffered by Plaintiff and members of the Class are relatively small compared to the burden and expense that would be required to individually litigate their claims against the IHSA, so it would be impracticable for members of the Class to individually seek redress for the IHSA's wrongful conduct. Even if members of the Class could afford individual litigation, the court system could not. Individualized litigation creates a potential for inconsistent or contradictory judgments, and increases the delay and expense to all parties and the court system. By contrast, the class action device presents far fewer management difficulties, and provides the benefits of single adjudication, economy of scale, and comprehensive supervision by a single court.

VII. CLAIMS ALLEGED

COUNT I
NEGLIGENCE
(On Behalf of the Class)

145. Plaintiff adopts and incorporates by reference all prior paragraphs of this Complaint as if fully set forth herein.

146. At all relevant times, the IHSA had a duty toward Plaintiff and the Class to supervise, regulate, monitor and provide reasonable and appropriate rules to minimize the risk of injury to Illinois' high school football players.

147. The IHSA acted carelessly and negligently in its position as the regulatory body for high school football and the student-athletes engaging in that sport, including Plaintiff and the Class. The IHSA knew, or should have known, that its actions or its inaction in light of the rate and extent of concussions reported and made known to the IHSA would cause harm to players in both the short- and long- term.

148. The IHSA was careless and negligent by breaching the duty of due care it assumed for the benefit of the Plaintiff and the Class, both generally and in the following particular respects:

a. Failing to properly mandate the removal of athletes who have appeared to suffer concussions in practice;

b. Failing to require medical personnel at IHSA football contests with specific expertise in concussion diagnosis, treatment, and management;

c. Failing to require that medical personnel be available for the football practices of IHSA's member schools;

d. Failing to implement pre-season and regular season baseline testing for detecting and managing concussions;

e. Failing to track and report concussions in order to have complete data that will enable IHSA to adopt best practices for combatting concussions;

f. Failing to mandate any concussion education training of trainers that work with IHSA's member schools' football teams;

g. Failing to take any measures for educating teachers and other school personnel on how to implement recommendations from the doctors of concussed athletes.

h. Concealing pertinent facts; and

i. Other acts of negligence or carelessness that may materialize during the pendency of this action.

149. As a result of the IHSA's negligent conduct as alleged herein, Plaintiff and the Members of the Class were and are endangered during their high school football careers.

150. Plaintiff and the Class are entitled to injunctive relief requiring the IHSA to, among other things, adopt corrective measures regarding:

- Implementation of a concussion protocol that protects student athletes at practice, as well as games;
- Implementation of pre-season baseline testing;
- Implementation of a program for concussion reporting and tracking;
- Implementation of policies requiring the presence of medical personnel with specific expertise in managing, identifying, and treating concussions at IHSA football games;
- Implementation of policies requiring the availability of medical personnel with specific expertise in managing, identifying, and treating concussions at the football practices of IHSA member schools;
- Implementation of a program for educating the trainers working with IHSA member schools' football teams;
- Implementation of system-wide guidelines for the screening and detection of head injuries;

- Implementation of a program for educating the faculty of IHSA member schools on concussions and their identification; and

- Implementation of policies addressing the treatment and eligibility of student-athletes who have sustained multiple concussions in the course of play.

COUNT II
MEDICAL MONITORING
(On Behalf of the Class)

151. Plaintiff adopts and incorporates by reference all prior paragraphs of this Complaint as if fully set forth herein.

152. Plaintiff brings this Count II as a remedy under the law of the State of Illinois.

153. The Class has been exposed to a greater risk of concussions and sub-concussions, which have created an increased risk of long-term injury and the illnesses as described above.

154. The members of the Class have not yet fully manifested the long-term physical and mental effects of the injuries caused by the IHSA's misconduct, and require specialized testing that is not generally given or available to the public at large for the early detection of the long-term effects of concussions and sub-concussions.

155. Medical monitoring is reasonably necessary according to contemporary scientific principles within the medical community that specialize in close head injuries and their connection to memory loss, early onset dementia, CTE and Alzheimer-like syndromes.

156. By monitoring and testing former (and current) IHSA football players who are believed to have suffered a concussion or sub-concussion while playing or practicing, the risk of each such player suffering long-term injuries, disease and losses as described above will be significantly reduced.

157. Because the IHSA has failed to properly, reasonably and safely monitor, test or otherwise study whether and when a player has suffered a concussion or sub-concussion to minimize the risk of long-term injury or illness, medical monitoring is the most appropriate

method by which it can be determined whether a particular individual is now at risk for long-term injury or illness from a concussion or sub-concussive event.

158. Accordingly, the IHSA should be required to establish a medical monitoring program that includes, among other things:

a. Establishing a fund, in an amount to be determined, to pay for the medical monitoring of the Class;

b. Notifying all Class members in writing that they may require frequent medical monitoring; and

c. Providing information to treating team physicians to aid them in detecting concussion or sub-concussions and to assist them in determining when the student-athlete is subjected to an increased risk of harm.

159. Plaintiff and the Class have no adequate remedy at law in that monetary damages alone cannot compensate them for the risk of long-term physical and economic losses due to concussions and sub-concussive injuries. Without a Court-approved medical monitoring program as described herein, or established by the Court, Plaintiff and the Class members will continue to face an unreasonable risk of injury and disability.

VIII. JURY DEMAND

Plaintiff demands a trial by jury of all claims in this Complaint so triable.

IX. REQUEST FOR RELIEF

WHEREFORE, Plaintiff, individually and on behalf of the Class, requests judgment as follows:

A. Certification of the proposed Class;

B. Designation of Plaintiff as representative of the proposed Class and designation of Plaintiff's counsel as Class counsel;

C. Injunctive relief;

D. The establishment of a medical monitoring program;

E. An award to Plaintiff and the Class of costs, and attorneys' fees; and

F. An award to the Plaintiff and Class for such other and further relief as the Court deems just and proper.

Dated: November 29, 2014

Respectfully submitted,

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