TRAUMATIC BRAIN INJURY PERMEATES THROUGH YOUTH SPORTS FROM A LACK OF EFFECTIVE RETURN-TO-PLAY POLICIES

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I. INTRODUCTION

After tackling an opponent to the ground-striking his head on a thin layer of grassy dirt below him in the process-thirteen-year-old Zack Lystedt laid on the field grasping both sides of his helmet.¹ In response to his demonstration of physical distress, his coaches sidelined Lystedt for just several plays prior to half-time, after which the young teenager returned to play for the beginning of the third quarter.² The accumulation of multiple, successive hits throughout the second half, however, ultimately caused Lystedt to collapse following the game.³ Local emergency personnel responded by airlifting Lystedt to a nearby medical center where he underwent extensive but ultimately life-saving surgery, which involved removing fragments of his skull to relieve the immense pressure that proliferated from the swelling of his brain.⁴ Lystedt suffered the severe consequences of prematurely returning to the football field following a concussion, precipitating a remarkably arduous-albeit miraculousrehabilitation process that altered the trajectory of his life.⁵ Unfortunately, as in many cases, it took a tragedy to prompt legislative action to address an area of law that-up to this point in time-had received minimal attention.

Since 2009, all fifty states have rendered an interpretation of "Lystedt" legislation,⁶ "the first comprehensive mandate in the United States" directed toward reducing the incidence of concussions among youth athletes and

^{1.} The Lystedt Law: A Concussion Survivor's Story, CDC, http://www.cdc.gov/headsup/pdfs/ stories/031210-zack-story.pdf (last visited Mar. 29, 2024).

^{2.} *Id*.

^{3.} *Id*.

^{4.} *Id*.

^{5.} *Id*.

^{6.} Katharine Silbaugh, *The Legal Design for Parenting Concussion Risk*, 53 U.C. DAVIS L. REV. 197, 197 (2019).

protecting against further head injuries in the event that one occurs.⁷ The Lystedt laws consist of three major components: (1) removing from games athletes who appear to have suffered a head injury; (2) requiring a licensed healthcare provider to medically clear the athlete before he or she returns to play; and (3) educating coaches, parents, and athletes about the initial signs of a concussion.⁸ While the promulgation of these laws has undoubtedly brought awareness to the need for greater uniformity for adequate concussion protocols in youth sports programs, there still exists ample room for improvement.

Lystedt legislation offers a framework by which those involved in youth sports programs must abide when either managing existing concussion protocols or developing new ones. The manner in which different states have implemented these laws, however, is reactive in nature and varies tremendously based on interpretation. For example, while most states require coaches to remove an athlete whom they suspect has sustained a concussion from the field of play for at least the remainder of that day, Arizona and South Carolina permit such athletes to return to play in the same game if a healthcare professional issues medical clearance.⁹ Further, the sheer number of different types of schools that youth athletes attend fosters additional layers of complication. As it stands, roughly 25% of existing state legislation regarding concussion protocols applies to public high schools, 25% applies to both public middle and high schools, while the remaining 50% applies to all grades within the public K-12 spectrum.¹⁰ However, only about 20% of state concussion legislation currently accounts for either private or charter institutions.¹¹ Thus, to better encourage effective enforcement of adequate concussion protocols, legislators must establish a seemingly homogeneous set of standards that states can impose with equal force.

This Note seeks to illuminate some of the opaque ambiguities inherent in current legislation that will serve as a backdrop to suggesting how Congress can effectuate a nationally recognized standard of assigning liability regarding negligent or reckless enforcement of return-to-play policies for

^{7.} Susan Gregg, *10 years ago: Lystedt concussion law made U.S. sports safer*, UW MED. (May 14, 2019), https://newsroom.uw.edu/news/10-years-ago-lystedt-concussion-law-made-us-sports-safer.

^{8.} Alan T. Arakkal et al., *Evaluating the Effectiveness of Traumatic Brain Injury State Laws Among High School Athletes*, INJ. EPIDEMIOLOGY (Apr. 13, 2020), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7153238/pdf/40621_2020_Article_241.pdf.

^{9.} State Legislation and Policy, SHAPE AM., https://www.shapeamerica.org/standards/guidelines/ Concussion/state-policy.aspx (June 2017).

^{10.} Id.

^{11.} Id.

youth athletes. Unfortunately, youth programs do not reap the monetary benefits characteristic of professional organizations; therefore, they accrue very little public attention, especially when compared to entities like the National Football League or National Collegiate Athletic Association. However, by standardizing a more holistic set of procedures for managing concussions—expounding upon Lystedt legislation—youth athletes will receive significantly enhanced protections from both the severe short-term and long-term effects of concussions. The analysis will provide relevant background information about the implications of head trauma on youth athletes, perform a comparative assessment of return-to-play policies that currently exist, demonstrate how the Lystedt laws assign liability, and propose a legislative solution that promotes greater awareness, uniformity, and enforcement.

II. SEVERITY OF TRAUMATIC BRAIN INJURY ON YOUTH ATHLETES

On September 11, 2015, while attempting to make a tackle on a kickoff return, sixteen-year-old Ben Hamm collided with an opposing player—a hit that seemed ostensibly harmless and not unlike others.¹² He passed away several days later.¹³ On September 28, 2018, sixteen-year-old Dylan Thomas collapsed in the third quarter of a high school football game.¹⁴ Although he required assistance standing back up, Dylan managed to respond coherently to questions later posed to him by the training staff.¹⁵ Devastatingly, however, he passed away two days later from concussion-related complications.¹⁶ In November of 2015, while attempting to score, seventeen-year-old Luke Schemm endured what appeared to be an ordinary tackle.¹⁷ Unbeknownst to Schemm and his family, despite a lack of head contact

^{12.} Paighten Hawkins, *Wesleyan Christian School High School Football Player Dies After Injury*, TULSA WORLD, https://www.tulsaworld.com/communities/bartlesville/wesleyan-christian-school-high-school-football-player-dies-after-injury/article_604c55cf-26f0-5fba-8c18-f4f3f1e93521.html (last updated Aug. 27, 2020).

^{13.} Id.

^{14.} Amir Vera, *High School Football Player Died of Cardiac Arrest Stemming from Head Injury, Coroner Says*, CNN: HEALTH (Oct. 9, 2018, 5:56 PM), https://www.cnn.com/2018/10/09/health/dylan-thomas-georgia-high-school-football-cause-of-death/index.html.

^{15.} *Id*.

^{16.} *Id*.

^{17.} Cam Smith, Parents of Kansas Teen Luke Schemm Believe Death Was a 'Fluke Accident', USA TODAY (Nov. 5, 2015), https://usatodayhss.com/2015/parents-of-late-kansas-teen-luke-schemm-believe-death-was-a-fluke-accident.

during the game, something triggered a concussion that would ultimately lead to his death.¹⁸

A. Traumatic Brain Injuries

The skull surrounds and protects the brain, which is made of soft tissue and enclosed by a cushion of spinal fluid.¹⁹ A concussion is a type of brain injury that results from any type of blow to the head, or even the body, that causes the brain to move around in the skull—often damaging blood vessels, injuring nerves, or bruising portions of the brain itself.²⁰ Because the brains of youth athletes do not finish developing until later in life, they are more susceptible to brain trauma stemming from a concussion, which can adversely impact cognitive, emotional, physical, or sleep-related functions.²¹

A component of concussion management that deserves scrupulous attention-perhaps, the most attention-for coaches, parents, and athletes alike is that of second impact syndrome, a condition serving as the impetus of Lystedt legislation. Predominantly associated with athletes under the age of nineteen, the syndrome manifests when, after an initial concussion, an athlete suffers a second head injury before the symptoms of the first have completely dissipated.²² The process involves the loss of autoregulation of the brain's blood supply, leading to vascular engorgement, increased intracranial pressure, brain herniation and potentially, like in the severe case of Zack Lystedt, coma or death.²³ Research has suggested that second impact syndrome more gravely affects younger athletes because their brains are still maturing.²⁴ Put another way, the autoregulation of blood supply in a youth athlete's brain cannot withstand physical impact as vigorously as that of an adult's fully developed brain.²⁵ Additionally, studies have indicated that greater head-to-body ratios, thinner cranial bones, as well as discrepancies in fitness levels and equipment, all contribute to the higher incidence of

^{18.} *Id.*; Kirstie Chiappelli, *Kansas High School Football Player Dies After Collapsing on Field*, THE SPORTING NEWS (Nov. 4, 2015), https://www.sportingnews.com/us/more/news/kansas-high-school-football-player-luke-schemm-brain-dead-life-support-collapse/f7mjg98yj6nz160xta9kbsbzn.

^{19.} Megan A. Moreno, *Youth Sports and Concussion Risk*, JAMA (Apr. 2012), https://jamanetwork.com/journals/jamapediatrics/fullarticle/1148388.

^{20.} Id.

^{21.} Id.

^{22.} Sergio R. Russo Buzzini & Kevin M. Guskiewicz, *Sports-Related Concussion in the Young Athlete*, 18 CURRENT OP. PEDIATRICS, 376, 377 (2006).

^{23.} Id.

^{24.} Id. at 377, 380-381.

^{25.} Id. at 377.

concussions experienced by youth athletes.²⁶ When youth athletes undergo growth spurts, they experience rapid increases in weight and mass, which translates to greater force and momentum produced during collisions on the sports fields. More forceful contact coupled with the weaker neck muscles characteristic of younger athletes equates to a heightened risk of encountering brain trauma.²⁷

B. Long-Term Consequences of Brain Trauma

Advancements in medical technology have dramatically increased doctors' understanding of the short and long-term consequences of traumatic brain injuries.²⁸ Brain trauma can lead to both temporary and permanent deficits in cognitive, physical, and emotional health.²⁹ These complications may relate to "thinking (including memory and reasoning); sensation (including sight and balance); language (including communication, expression, and understanding); and emotion (including depression, anxiety, ... aggression, ... and social inappropriateness)."³⁰ Regardless of age, persons who experience concussions face an increased risk of developing certain brain disorders, such as dementia and Parkinson's disease,³¹ whereas adolescents who suffer concussions face an additional increased risk of developing multiple sclerosis in adulthood.³²

Not only are youths more prone to concussions than adults, but they also recover more slowly—to the extent that doctors consider them part of a "prolonged recovery group."³³ While concussion symptoms tend to subside for most people within a week, individuals in prolonged recovery groups report symptoms for up to forty-five to ninety days following their

^{26.} Id.

^{27.} Id.

^{28.} Silbaugh, supra note 6, at 214.

^{29.} Id.

^{30.} Id.

^{31.} *Caution Ahead: Linking Concussions to Parkinson's and Dementia*, PARKINSON'S FOUND. (Sep. 18, 2020), https://www.parkinson.org/blog/science-news/concussions-dementia.

^{32.} Gretchen Reynolds, *Concussions in Teenagers Tied to Multiple Sclerosis Risk*, N.Y. TIMES (Oct. 18, 2017), https://www.nytimes.com/2017/10/18/well/move/concussions-in-teenagers-tied-to-multiple-sclerosis-risk.html.

^{33.} Annie Baillargeon et al., Neuropsychological and Neurophysiological Assessment of Sport Concussion in Children, Adolescents and Adults, 26 BRAIN INJ. 211, 211 (2012).

concussion.³⁴ Moreover, evidence suggests that one-quarter of youth athletes also encounter post-concussion amnesia, which can produce both memory and attention degeneration over the span of decades.³⁵ Although the precise long-term consequences resulting from concussions remain somewhat unclear, emerging data present alarming potential dangers. One study revealed that nearly 15% of individuals who have suffered a concussion experience mental deficits just one year following the injury.³⁶ Another study compared the cognitive abilities of adults who had suffered a concussion around thirty years ago to a control group of adults who had not.³⁷ The results conveyed that the adults with no history of a concussion exercised superior cognitive functions.³⁸ These results bring to light some of the disturbing risks associated with concussions for adults, let alone for adolescents, which further accentuates the need for prompt legislative action.

C. Need for Greater Legislative Attention

Despite the fluid nature of concussion-related research and the need for still more conclusive analysis, traumatic brain injuries evidently subject the safety and wellbeing of all individuals who encounter them to a significant threat—a threat that bears detrimental health costs, especially discriminating against adolescents. The devastating stories previously recounted about children who have lost their lives as a direct consequence of substandard return-to-play policies, in addition to dozens of other similar tragedies, have sufficiently placed legislators on notice about the severity of the issue and the haste with which it must be addressed.

The controversy surrounding concussion protocols and return-to-play policies constantly permeates the headlines when it relates to the National

^{34.} Michael McCrea et al., Incidence, Clinical Course, and Predictors of Prolonged Recovery Time Following Sport-Related Concussion in High School and College Athletes, 19 J. INT'L NEUROPSYCH. Soc'Y 22, 30 (2013).

^{35.} Erik Hessen et al., Neuropsychological Function in a Group of Patients 25 Years After Sustaining Minor Head Injuries as Children and Adolescents, 47 SCANDINAVIAN J. PSYCH. 245, 249-50 (2006).

^{36.} Kerry McInnes et al., *Mild Traumatic Brain Injury (mTBI) and Chronic Cognitive Impairment:* A Scoping Review, PLOS ONE 2 (Apr. 11, 2017), https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0174847&type=printable.

^{37.} Louis De Beaumont et al., Brain Function Decline in Healthy Retired Athletes Who Sustained Their Last Sports Concussion in Early Adulthood, 132 BRAIN 695, 703-04 (2009).

^{38.} Id. at 700.

Football League (NFL).³⁹ As recently as September 29, 2022, the NFL faced tremendous scrutiny regarding the way in which it handled how one of its prominent players, Tua Tagovailoa, endured successive blows to the head.⁴⁰ A concussion expert "[sounded] the alarm, calling on the NFL, players and coaches to do more to protect against potentially life-threatening head injuries."⁴¹ This constitutes a mere single instance out of a multitude where immense public outrage materializes after a prominent professional athlete enters the limelight for undergoing a violent head injury.

Tagovailoa's concussion experience certainly deserved the attention it received; however, it begs the question as to why legislative bodies have failed to exude even a fraction of analogous energy over the same issue related to youth athletes—a segment of the population that not only holds less agency but that is also subject to harsher risks with respect to traumatic brain injuries. A segment of the population whose leading cause of death from playing sports is brain injuries.⁴² A segment of the population that from 2000 to 2019, experienced 734,967 trips to the emergency room for brain injuries among children who played football between the ages of five and eighteen.⁴³ A segment of the population that from 2005 to 2014, had an annual death rate of 2.8 among high school and college football players stemming from traumatic brain injuries.⁴⁴

Professional organizations consistently amend and strengthen their concussion protocols on a year-to-year basis, while youth athletes have been afforded protection under comparatively archaic legislation passed back in

^{39.} See, e.g., Ben Morese, NFL Faces Intense Scrutiny Over Concussion Protocols, CNN, https://www.cnn.com/2022/10/03/sport/nfl-concussion-scrutiny-tua-tagovailoa-spt-intl/index.html (Oct. 3, 2022, 9:20 PM); Becky Sullivan, Explaining the NFL's Latest Concussion Controversy and Policy Change, NPR (Oct. 13, 2022, 5:00 AM), https://www.npr.org/2022/10/13/1128524103/nfl-concussion-latest.

^{40.} Brad Mielke & Ivan Pereira, *NFL Under Fire Over Its Concussion Protocol Following Tua Tagovailoa's Back-to-Back Game Hits*, ABC NEWS (Oct. 3, 2022, 6:54 PM), https://abcnews.go.com/ Sports/nfl-fire-concussion-protocol-tua-tagovailoas-back/story?id=90918691.

^{41.} Id.

^{42.} *Sports Injury Statistics*, STAN. MED. CHILD.'S HEALTH, https://www.stanfordchildrens.org/en/topic/default?id=sports-injury-statistics-90-P02787 (last visited Mar. 30, 2024).

^{43.} Brian Bushard, 6.2 Million U.S. Children Suffered Traumatic Brain Injuries from Sports Equipment from 2000 to 2019, With a Higher Increase Among Girls, Study Finds, FORBES (July 14, 2022, 12:00 AM), https://www.forbes.com/sites/brianbushard/2022/07/14/62-million-us-children-suffered-traumatic-brain-injuries-from-sports-equipment-from-2000-to-2019-with-a-higher-increase-among-girls-study-finds/?sh=3ca15cbc2d11.

^{44.} Kristen L. Kucera et al., *Traumatic Brain and Spinal Cord Fatalities Among High School and College Football Players—United States 2005-2014*, CDC (Jan. 6, 2017), https://www.cdc.gov/mmwr/volumes/65/wr/mm6552a2.htm.

2009⁴⁵—legislation that local governments have inconsistently and reactively enforced throughout the past decade.⁴⁶ A change is needed. Legislators should have guiding materials that advise them upon a nationally standardized application of concussion protocols and return-to-play policies that elicit sufficiently safe playing conditions for youth athletes. Although enforcing consistent, widespread legislation focused on maintaining safe conditions for youth athletes posits a steep challenge, independent, bureaucratic entities exist-like the National Conference of Commissioners on Uniform State Laws (NCCUSL) and the American Law Institute (ALI)that emerged with the specific objective of bringing clarity to obscure areas of the law.⁴⁷ If the NCCUSL and ALI have substantially influenced other aspects of the law by generating persuasive authority like the Uniform Commercial Code and The American Restatement of Torts, then they undoubtedly can assist in the process of implementing a more homogenous interpretation of Lystedt legislation. By referring to both the resources provided by legal experts and precedents set by established athletic associations, states will fare far better in effectively legislating concussion management for youth athletes.

III. ANALYSIS OF LYSTEDT LAWS

The mismanagement of Zack Lystedt's concussion, which resulted in severe medical complications from second impact syndrome, prompted Washington State to pass the first concussion return-to-play laws in 2009.⁴⁸ Lystedt legislation consists of three main elements. The first element—and typically the most scrutinized—revolves around educating parents, coaches, and athletes about how to identify the initial signs of a concussion.⁴⁹ The second component deals with the removal of players who have apparently suffered a concussion, generally mandating that if an athlete exhibits symptoms of a concussion, coaches must immediately take him off the playing field.⁵⁰ Finally, Lystedt legislation mandates that those athletes

^{45.} Silbaugh, *supra* note 6, at 218.

^{46.} See, e.g., How Concussion Legislation is Failing Young Athletes, ATHLETIC BUS., (Apr. 20, 2020), https://www.athleticbusiness.com/operations/safety-security/article/15159031/how-concussion-legislation-is-failing-young-athletes.

^{47.} *About Us,* UNIF. L. COMM'N, https://www.uniformlaws.org/aboutulc/overview (last visited Feb. 3, 2023); *About ALI*, AM. L. INST., https://www.ali.org/about-ali/ (last visited Mar. 30, 2024).

^{48.} Silbaugh, *supra* note 6, at 218.

^{49.} Id. at 219.

^{50.} Id.

suffering from concussions, or at least demonstrating signs indicative of a concussion, may not return to play until they receive medical clearance from a designated healthcare provider.⁵¹

Within just six years, the remaining forty-nine states followed suit by passing legislation that mirrored the Lystedt laws.⁵² State adoption of Lystedt legislation transpired rapidly—the public reception of which encountered much support.⁵³ The support even culminated with NFL Commissioner, Roger Goodell, sending a letter to all state governors advocating for them to pass legislation that corresponded with the Lystedt elements.⁵⁴ While this inception stage represented a significant step toward cultivating a nationally recognized standard for concussion protocols, its uniquely quick nature made it difficult for legislators and legal experts to conduct adequate research regarding its true efficacy.⁵⁵

Conforming with the Lystedt framework surely provides youth athletes with protection. However, because the laws are reactive in nature, this protection is limited to merely preventing further harm to the brain rather than harm to the brain altogether. The current laws may succeed in reducing the number of subsequent, detrimental blows to the head following an athlete's initial concussion, but they fall short in averting—or at least lessening the impact of—devastating traumatic brain injuries from occurring in the first place. Either preventing or lessening the initial harmful contact may seem impracticable, but when considering that new research evinces that just a single traumatic brain injury can lead to considerably higher risks of developing degenerative diseases like Alzheimer's or dementia later in life, it becomes abundantly clear that the law must play a greater role in mitigating the negative effects characteristic of all harmful blows to the head.⁵⁶

Lydstedt laws offer a general structure for enforcing return-to-play policies, but states ultimately retain the discretion to enforce them in a manner that aligns with their specific interpretation. Thus, the ambiguous

^{51.} Id.

^{52.} Lindsey B. Straus, *Concussion Safety Laws in Place in Every State*, MOMSTEAM, https://www.momsteam.com/health-safety/every-state-has-youth-sports-concussion-safety-law (Apr. 3, 2015).

^{53.} See Gregg, supra note 7; Phoebe Anne Amberg, Protecting Kids' Melons: Potential Liability and Enforcement Issues with Youth Concussion Laws, 23 MARQ. SPORTS L. REV. 171, 171-72, 177 (2012).

^{54.} Associated Press, *Goodell Sends Letter to 44 Governors*, ESPN (May 23, 2010), http://www.espn.com/nfl/news/story?id=5212326.

^{55.} Silbaugh, *supra* note 6, at 218.

^{56.} Head Injury 25 Years Later – Penn Study Finds Increased Risk of Dementia, PENN MED. NEWS (March 9, 2021), https://www.pennmedicine.org/news/news-releases/2021/march/head-injury-25-years-later-penn-study-finds-increased-risk-of-dementia.

construction of certain Lystedt elements has resulted in an inconsistent application of the laws.⁵⁷ For example, about half of states do not require coaches to undergo concussion-identification training intended to prepare them for circumstances where athletes appear concussed, notwithstanding Lystedt legislation's principle objective of avoiding second impact syndrome.⁵⁸ Only seven states require referees to participate in concussion training, despite the integral function they undertake in maintaining safety during the course of competition.⁵⁹ Forty-four states require that athletes themselves engage in some form of passive concussion training, while all but one state mandate that parents partake in active training.⁶⁰ These variations comprise just several discrepancies out of countless others, but they nonetheless highlight the present lack of uniformity with which states interpret Lystedt laws.

IV. COMPARING RETURN-TO-PLAY POLICIES

A. National Football League Interpretation

To avoid the unnecessary cumbersomeness associated with legislating an issue that lacks a substantive historical backdrop, examining existing procedures from established athletic entities provides useful guidance. Starting at the top, the behemoth that is the National Football League brought to life an extensive Concussion Diagnosis and Management Protocol to which all teams must strictly abide.⁶¹ An independent board of NFL-affiliated advisors known as the NFL Head, Neck and Spine Committee—including physicians, scientists, and members of the NFL's Player Association—review the contents of the protocol every year to ensure that it reflects optimal medical practices that sufficiently promote player safety.⁶²

^{57.} Silbaugh, *supra* note 6, at 219.

^{58.} Chris Lau, Note, Leaders and Laggards: Tackling State Legislative Responses to the Youth Sports Concussion Epidemic, 85 FORDHAM L. REV. 2879, 2888 (2017).

^{59.} Sungwon Kim et al., Legislative Efforts to Reduce Concussions in Youth Sports: An Analysis of State Concussion Statutes, 27 J. LEGAL ASPECTS SPORTS 162, 171 (2017).

^{60.} Silbaugh, supra note 6, at 219.

^{61.} NFL Head, Neck, and Spine Committee's Concussion Diagnosis and Management Protocol, NFL PLAYER HEALTH & SAFETY (Oct. 8, 2022), https://static.www.nfl.com/image/upload/v1665264248/league/moexjmdzy2kvjtqsdpbx.pdf.

^{62.} NFL Concussion Diagnosis and Management Protocol (PDF), Fact Sheets, NFL PLAYER HEALTH & SAFETY (OCT. 8, 2022), https://www.nfl.com/playerhealthandsafety/resources/fact-sheets/nfl-head-neck-and-spine-committee-s-concussion-diagnosis-and-management-protocol.

The relevant procedures under the protocol span over nineteen pages that exhaustively outline every imaginable aspect pertinent to concussion management—detailing the pregame and in-game procedures, assessment guidelines, game day checklist requirements, return to participation conditions, and even a table demonstrating an example of successful protocol completion.⁶³ Prior to the commencement of a season, players must engage in a formal educational concussion overview to familiarize themselves with the intricacies related to both reporting and identifying the signs and symptoms linked to various forms of head trauma.⁶⁴ Additionally, during the preseason, team doctors conduct baseline neurological evaluations to develop a better understanding of each individual player's unique neural condition.⁶⁵

Gameday regulations require the presence of both an Unaffiliated Neurotrauma Consultant and Booth Certified Athletic Trainer Spotter who specialize in concussion treatment; they lead a pregame medical team meeting informing all affiliated medical personnel of important in-game procedures.⁶⁶ Not only do these specialists supervise sideline concussion assessments, but they also conduct comprehensive locker room concussion assessments when necessary.⁶⁷ When a player suffers a concussion, NFL protocol instructs team physicians to follow a stringent five-phase return-to-participation process, before allowing concussed players back on the field.⁶⁸ These general aspects of the NFL's concussion protocol, while significant, constitute just a mere fraction of the meticulously elaborate layout of the document, which seemingly addresses any and all contingencies. While the NFL's protocol enforcement certainly dwarfs that of any existing youth adaptation, it, nonetheless, provides a blueprint towards which youth organizations must strive to attain more holistic, consistent enforcement.

B. National Collegiate Athletic Association Interpretation

Like the NFL, the National Collegiate Athletic Association (NCAA) enforces strict concussion protocol regulations; however, rather than simply applying to an individual sport, the NCAA commands that all sports programs that fall under its jurisdictional umbrella—whether Division I,

^{63.} NFL Head, Neck and Spine Committee's Concussion Diagnosis and Management Protocol, supra note 61.

^{64.} *Id.* at 3.

^{65.} Id.

^{66.} Id. at 7.

^{67.} *Id.* at 8.

^{68.} Id. at 14-17.

Division II, or Division III— must comply with the contents of its protocol.⁶⁹ In 2015, the NCAA created the Concussion Safety Protocol Review Process, which required each affiliated institution to submit an annual concussion safety protocol to the Concussion Safety Protocol Committee.⁷⁰ This approach varied slightly from the NFL, for the NCAA allowed collegiate programs to exercise greater autonomy with respect to developing procedures that corresponded to the localized set of circumstances inherent to the school. This exercise of discretion is not limitless, however, for a school's proposed concussion safety protocol is contingent upon earning a stamp of approval from the legislatively-backed protocol committee. Entitling each program to a small degree of self-governance is intuitive, considering the sheer number and vast diversity of sports within the NCAA, which starkly contrasts from the scope of responsibility pertaining to the NFL.

Although the NCAA does not require schools to administer a uniform, standardized protocol concerning player safety, it does extend—as a resource—a Concussion Safety Protocol Checklist to which athletic programs may refer before submitting their independent versions.⁷¹ The checklist offers several suggestions regarding the type of provisions that programs should strongly consider applying to their respective protocols, such as content expounding upon pre-season education, pre-participation assessments, recognition and diagnosis of concussions, and initial suspected concussion evaluations.⁷² The NCAA Concussion Safety Advisory Group annually reviews the Checklist to determine whether it should make revisions based on the latest research data and accepted industry practices.⁷³

In conjunction with keeping a regularly updated management plan and concussion safety protocol, the NCAA makes it mandatory for affiliated collegiate programs to comply with the "Interassociation Recommendations," which discuss best practices surrounding the prevention of catastrophic injuries for collegiate athletes.⁷⁴ Unanimously endorsed by the NCAA Board of Governors and unvaryingly enforced by all programs—regardless of the sport—under the Uniform Standard of Care Procedures,

^{69.} Concussion Safety Protocol Management, NAT'L COLLEGIATE ATHLETIC ASS'N, https://www.ncaa.org/sports/2016/7/20/concussion-safety-protocol-management.aspx (last visited Jan. 13, 2023).

^{70.} Id.

^{71.} *Concussion Safety Protocol Checklist*, NCAA SPORT SCI. INST., https://ncaaorg.s3.amazonaws. com/ssi/concussion/2020_Concussion_Safety_Protocol_Checklist.pdf (last visited Jan. 10, 2023).

^{72.} Id.

^{73.} Concussion Safety Protocol Management, supra note 69.

^{74.} Id.

these recommendations delve deeply into context-specific circumstances in which athletes may find themselves after experiencing a catastrophic injury.⁷⁵

While the NCAA leaves room for schools to exercise discretion when shaping concussion protocols, there nevertheless exists a number of non-negotiables mandated by legislation. Active member institutions shall enforce concussion management plans that include, but are not limited to, illuminating upon the following: annual education programs for student-athletes, availability of adequate processes for responding to student-athletes suffering concussions, sufficient return-to-play policies, and access to trained physicians capable of providing proper medical clearance.⁷⁶

The NCAA, unlike the NFL, permits its members to draft individual versions of the methods to which they intend to adhere when assisting athletes who have suffered from concussions.⁷⁷ Despite this distinguishing factor between the NFL and NCAA, the result is almost identical. Both organizations provide ample resources with which their affiliates may consult for guidance, and each commands, albeit through different means, that concussion protocols apply a certain minimum standard of care characterized by the existence of mandatory provisions. The way in which the NCAA and NFL regulate the implementation of concussion protocols is distinct from the existing state legislation regarding youth return-to-play policies. Professional and collegiate entities effectively assert both proactive and reactive measures for managing concussions, while Lystedt legislation assumes more of a passive, reactive course of action. The NCAA and NFL also compel a higher degree of uniformity because they require members to stringently observe several nonnegotiable provisions, whereas the minimum standard of care induced by Lystedt laws fails to impose a similar duty, which achieves an inconsistent application of law. Consequently, adolescents-who already constitute one of the most physically vulnerable segments of the population—face an even greater risk of harm with respect to brain trauma when engaging in sports, especially when compared to those athletes at the collegiate and professional levels.

^{75.} Id. See also Preventing Catastrophic Injury and Death in Collegiate Athletes, NCAA SPORT SCI. INST., https://ncaaorg.s3.amazonaws.com/ssi/injury_prev/SSI_PreventingCatastrophicInjuryBooklet. pdf (last visited Mar. 30, 2024); *Preventing Catastrophic Injury and Death in Collegiate Athletes*, NCAA SPORT SCI. INST., https://www.ncaa.org/sports/2019/7/11/preventing-catastrophic-injury-and-death-in-collegiate-athletes.aspx (last visited Mar. 30, 2024).

^{76.} NCAA, AUTONOMY PROPOSAL -- CONCUSSION SAFETY PROTOCOL 1 (2015).

^{77.} Id.

C. State Interpretation for Youth Athletes

Lystedt legislation indisputably enhanced the standard of safety applied to concussion management for youth athletes, yet it continues to fall short of accomplishing its desired objective—consistent enforcement that adequately diminishes the incidence of detrimental brain trauma. While Lystedt laws established a foundational structure for return-to-play policies, their equivocal nature has led to incongruous state interpretations that have adversely affected the wellbeing of adolescents.⁷⁸

Unlike the NCAA or NFL, which both similarly call on their affiliates to delineate explicit procedures in their respective return-to-participation policies that address elements of concussion management, the Lystedt laws merely provided a general, seemingly abstract framework to which states may refer for guidance. Recall that the outcome of Lystedt legislation centered around the promulgation of clearer safety protocols—particularly speaking to concussion identification, medical clearance, and education for relevant parties. In most cases, however, states have provided next to nothing when it comes to the practical application of these laws.⁷⁹ This gap in legislation has directly translated to the drastic differences in state interpretations, for almost no singular state manifestation of Lystedt laws parallels that of any other.⁸⁰

Although each state may commonly share legislation that incorporates elements of brain trauma education, return-to-play restrictions, and medical clearance requirements, the matter in which legislators craft these laws fluctuates. For example, Lystedt legislation mandates that youth sports programs involve a degree of concussion management education, but the extent to which states require the relevant parties to be educated varies greatly.⁸¹ Some states require educating only coaches, others require educating only parents, while still others require some alternative combination of coaches, parents, and players.⁸² Additionally, while some states mandate that athletes must first receive clearance from a licensed physician before returning to play, other states merely require that athletes

^{78.} Arakkal et al., supra note 8.

^{79.} See id.

^{80.} Summary Matrix of State Laws Addressing Concussions in Youth Sports, THE NETWORK FOR PUB. HEALTH L., https://www.networkforphl.org/wp-content/uploads/2019/11/Summary-of-State-Laws-Addressing-Concussions-in-Youth-Sports-5-28-19.pdf (updated May 2019).

^{81.} Amberg, supra note 53, at 176-77.

^{82.} Id. at 177-79.

receive clearance from a physician assistant or registered practicing nurse.⁸³ Complications surrounding state intervention in private schools further clouds these variances, for, in many states, private schools are not subjected to the mandates promulgated by Lystedt legislation.⁸⁴ These discrepancies may seem innocuous on their face, but the slight contrasts in state interpretation—in the aggregate—account for many of the devastating consequences youth athletes and their families have endured from a lack of consistent safety protocols.

Coaches, in most cases, spend significantly less meaningful and actual time with their athletes compared to that with which youth athletes spend in the presence of their legal guardians, which, on average, amounts to about ten hours of focused time each week.⁸⁵ Parents, therefore, possess a greater window of opportunity to observe the behavior of their children, which-for obvious reasons-serves as an absolutely critical factor when dealing with a concussed adolescent. By the same token, concussion protocols that defer to the expertise of physician assistants rather than licensed physicians, while seemingly insignificant, can render profoundly different results. Before physicians become licensed to practice, they must obtain a four-year college degree, complete four years of medical school, finish three to seven years of postgraduate residency training, and pass the extremely dense three-part United States Medical Licensing Examination series.⁸⁶ Physician assistants, on the other hand, may immediately begin practicing after completing, typically, a two-to-three year postgraduate physician assistant program and passing the Physician Assistant National Certifying Exam.⁸⁷

Highlighting this emphasizes the often-varying levels of specialization exercised by those medical professionals charged with making crucial decisions when it comes to youth athletes returning to play after suffering concussions. It begs the question why this sizeable gap in healthcare expertise is permissible when dealing with brain trauma suffered by youth athletes, who possess less developed skulls and more vulnerable brain tissue, while professional athletes are entitled to the mandatory presence of both an

^{83.} Id. at 176.

^{84.} Id. at 197; Lauren M. Simon & Cory N. Mitchell, Youth Concussion Laws Across the Nation Implications for the Traveling Team Physician, 15 CURRENT SPORTS MED. REPS. 155, 161, 164 (2016).

^{85.} *Talking with Teens: The YMCA Parent and Teen Survey Final Report*, GLOB. STRATEGY GRP., INC., https://clintonwhitehouse3.archives.gov/WH/EOP/First_Lady/html/teens/survey.html (last visited Mar. 30, 2024).

^{86.} PA vs. MD: Which Medical Career is Right for You?, ST. GEORGE'S UNIV. (Mar. 10, 2021), https://www.sgu.edu/blog/medical/pa-versus-md/.

^{87.} Id.

Unaffiliated Neurotrauma Consultant and Booth Certified Athletic Trainer Spotter, who specialize in concussion treatment, at all times during their competitive play.⁸⁸

Another staggering incongruity that has resulted from the failure to establish uniform legislation stems from the absence of a system of regular review. The NFL has a designated Head, Neck and Spine Committee comprised of independent advisors—including doctors, scientists, and administrators of the NFL—that annually reviews and updates its concussion protocols.⁸⁹ The NCAA has a Concussion Safety Advisory Group to which affiliate schools must send their updated concussion protocols every year.⁹⁰ The group also provides a checklist template to which affiliate schools may refer when drafting or amending their protocol documents, a checklist that the group revises on an annual basis.⁹¹

For youth athletes, however, there is no evidence that suggests even a semblance of a review system exists. In fact, legal research indicates quite the contrary. While organizations that oversee the health and safety of adult athletes have exercised various expressions of consistent review, five states still have not amended youth concussion management legislation since 2010, twenty-one have not updated since 2011, while ten more have maintained their original interpretation of Lystedt laws in place since 2012.⁹² Scarcity of money and resources should not serve as a crutch upon which state legislators can lean for abhorrently failing to establish a higher standard of care directed at protecting the health and safety of youth athletes.

V. PROPOSED RESOLUTION

The set of circumstances to which youth sports programs across the country are uniquely subjected (e.g., scarcity of resources) makes it challenging for states to employ any standardized system that yields relatively equal results—let alone one targeted at concussion management. However, a path toward more consistent regulation does exist. Independent, regulatory agencies of law, such as the NCCUSL or the ALI, provide a means of alternative processes that illuminate the opaque ambiguities that often permeate the law. These agencies, in essence, exist for the specific

^{88.} NFL Head, Neck, and Spine Committee's Concussion Diagnosis and Management Protocol, supra note 61, at 4-6.

^{89.} NFL Concussion Diagnosis and Management Protocol (PDF), supra note 62.

^{90.} Concussion Safety Protocol Management, supra note 69.

^{91.} Concussion Safety Protocol Checklist, supra note 71.

^{92.} Summary Matrix of State Laws Addressing Concussions in Youth Sports, supra note 80.

purpose of resolving the complex legal and policy discrepancies that the present issue of youth concussion management affords.⁹³

A. National Conference of Commissioners on Uniform State Laws

Established in 1892, the National Conference of Commissioners on Uniform State Laws, otherwise known as the Uniform Law Commission (ULC), "provides states with non-partisan, well-conceived and well-drafted legislation that brings clarity and stability to critical areas of state statutory law."⁹⁴ Comprised of practicing lawyers, judges, law professors, and legislators, the ULC's primary objective is to generate uniform state laws in areas of state law where uniformity is both "desirable and practical."⁹⁵ Its process of promulgating law mirrors that of actual legislature or Congress.⁹⁶ The ULC conference takes place on an annual basis, where its members critically evaluate each proposed uniform law under a comprehensive system of committee review.⁹⁷

When a committee member initially introduces a proposal, the Committee on Scope and Program determines whether the contents of the proposal achieve a sufficient standing—that the proposal merits action by the ULC.⁹⁸ Thus, any proposal can potentially obtain a review, particularly if it involves a serious policy concern.⁹⁹ If a proposal receives a favorable ruling, the Committee on Scope and Program refers it to a separate, subject-matter-oriented committee so that the proposal can materialize into a formal draft.¹⁰⁰ Once finalized, the draft undergoes an extensive evaluation by all members of the ULC, who convene in their entirety at a winter session prior to the subsequent annual meeting.¹⁰¹ Thereafter, those responsible for the draft read aloud each section in front of the collective group of members, which offers criticisms, suggestions, and objections.¹⁰² This review process can extend over multiple annual meetings; therefore, it could take years before a

^{93.} New York v. O'Neill, 359 U.S. 1, 10 (1959).

^{94.} UNIF. L. COMM'N, supra note 47.

^{95.} Id.

^{96.} Harry P. Lawther, Uniform State Laws, 18 TEX. L. REV. 436, 439 (1940).

^{97.} Id. at 440-41.

^{98.} Id. at 440.

^{99.} Id.

^{100.} Id.

^{101.} Id. at 441.

^{102.} Id.

proposal converts to actual legislation.¹⁰³ Nonetheless, upon sufficient appraisal, the draft is consummated and left up to a vote by the states, each having one vote and a majority of which turns the final proposal into actual legislation.¹⁰⁴

The ULC has adopted more than three hundred Uniform Laws, several of which have been incorporated—in some capacity—by all state legislatures, like the Uniform Commercial Code and Uniform Trade Secrets Act, whereas other legislation has been adopted by only a handful of states.¹⁰⁵ Regardless of whether states ultimately adopt ULC proposals in their entirety, the mere existence of these proposals has greatly affected long-range trends of legal doctrine in American jurisprudence.¹⁰⁶ The ULC, therefore, functions as a possible legal outlet through which states can improve upon and more effectively homogenize existing Lystedt legislation.

Previous conduct suggests that a precedent already exists for legislating matters related to youth athletes, for in 2000, the ULC promulgated the Athletes Agent Act (Act), which it amended into the Revised Uniform Athletes Agent Act in 2015 and again amended further as recently as 2019.¹⁰⁷ The Act governs relations between student athletes, athlete agents, and educational institutions, aiming to protect the interests of students by regulating the behavior of athlete agents.¹⁰⁸ While the type of youth interests this Act seeks to address differs considerably from the interests that Lystedt legislation tackles, it nevertheless illustrates that the ULC has a stake in protecting youth athlete interests—interests that arguably deserve even more attention than those the ULC has already addressed.

B. American Law Institute

In addition to the ULC, another organization that generates both persuasive and binding authority exists that similarly strives to both clarify and standardize current law—the ALI. Although distinct by name, the ULC and ALI are essentially birds of a feather. Following an analysis conducted

^{103.} Id.

^{104.} Id.

^{105.} Acts Overview, UNIF. L. COMM'N, https://www.uniformlaws.org/acts/overview (last visited Mar. 30, 2024).

^{106.} Lawrence J. Bugge, *William J. Pierce*, 89 MICH. L. REV. 2073, 2076 (1991) (quoting HANDBOOK OF THE NATIONAL CONFERENCE OF COMMISSIONERS ON UNIFORM STATE LAWS AND PROCEEDINGS OF THE ANNUAL CONFERENCE MEETING IN ITS EIGHTY-FIFTH YEAR 121 (1976)).

^{107.} Athletes Agents Act, UNIF. L. COMM'N, https://www.uniformlaws.org/committees/community-home?CommunityKey=cef8ae71-2f7b-4404-9af5-309bb70e861e (last visited Mar. 30, 2024).

^{108.} Id.

by a prestigious group of American lawyers, judges, and teachers, the ALI was established in 1923 as a response to the uncertainty and complexity that characterized American law at the time, which "had produced a 'general dissatisfaction with the administration of justice."¹⁰⁹ The ALI founders were disgruntled by the immense variation attributed to administering the law across different jurisdictions throughout the country, leading to the development of a Restatement of the Law.¹¹⁰ In a broad-sweeping effort between 1923 and 1944, the ALI crafted Restatements of the Law "for Agency, Conflict of Laws, Contracts, Judgments, Property, Restitution, Security, Torts, and Trusts," and went on to develop both a second and third series of Restatements over the next few decades.¹¹¹ The committee charged with the initial drafting suggested that "a Restatement of Law ... 'should not only ... promote those changes which will tend better to adapt the laws to the needs of life ... but should also take account of situations not yet discussed by courts or dealt with by legislatures."¹¹²

Beyond the scope of influence that the ALI wishes to impart with respect to modernizing and clarifying the law, it also seeks to serve as a driving force toward promoting sound public policy.¹¹³ By partaking in the annual meeting, members of the ALI—comprised of renowned lawyers, judges, and academics—have the distinguished opportunity to positively influence the law in both existing and emerging areas.¹¹⁴ The annual meeting is comprised of numerous group sessions—ranging from smaller discussions regarding niche aspects of the law to larger gatherings where thousands of individuals discuss the general implications of Restatements.¹¹⁵ Similar to the Uniform Law Commission, the process in which members of the ALI partake to substantiate proposals involves a scrupulous, often time-consuming, evaluation prior to the manifestation of tangible legislation.¹¹⁶ As a result, in conjunction with the Restatements, the ALI has produced the Uniform Commercial Code (while collaborating with the ULC), the Model Code of Evidence, as well as the Model Penal Code.¹¹⁷

^{109.} About ALI, supra note 47.

^{110.} Id.

^{111.} Id.

^{112.} Id.

^{113.} Norman L. Greene, *The American Law Institute: A Selective Perspective on the Restatement Process*, 62 How. L.J. 511, 515 (2019).

^{114.} Id.

^{115.} Id. at 516.

^{116.} Id. at 516-20.

^{117.} About ALI, supra note 47.

VI. CONCLUSION

Bearing in mind the objectives of both the ULC and ALI, it has become abundantly clear that state legislatures are equipped with the tools necessary for standardizing concussion management protocols among youth athletes. Undoubtedly, either members of state legislatures themselves or acquaintances with whom they associate have a direct voice within organizations like the ULC or ALI. The very purpose for which these organizations were conceived is targeted at the current problem appurtenant to Lystedt legislation-a lack of clarity and an inconsistent administration of law that produce detrimental consequences on public policy. Not only have these organizations previously addressed ambiguities in the law that parallel that with which is at issue, but a framework already exists upon which either the ULC or ALI (or both for that matter) can further develop. A combination of policies established by both the NFL and the NCAA coupled with the existing legislative backdrop provided by Lystedt legislation offers a seasoned template upon which experts may elaborate. This elaboration will culminate into a nationally-recognized, homogenous piece of legislation to which states can either refer or adopt in the process of providing better protection for our youth athletes.