The Florida Senate BILL ANALYSIS AND FISCAL IMPACT STATEMENT (This document is based on the provisions contained in the legislation as of the latest date listed below.)

	Prepared	d By: The	Professional S	taff of the Committe	e on Health Policy	
BILL:	SB 830					
INTRODUCER:	Senator Collins					
SUBJECT:	Youth Athletic Activities					
DATE:	January 29, 2	024	REVISED:			
ANALYST		STAFF	DIRECTOR	REFERENCE	AC	CTION
. Morgan		Brown		HP	HP Pre-meeting	
2.				AHS		
3.				FP		

I. Summary:

SB 830 creates s. 381.796, F.S., requiring that any unpaid or volunteer athletics personnel of an entity that administers or conducts a high-risk youth athletic activity, or training for such activity, on land owned, leased, operated, or maintained by the state or a political subdivision of the state, must complete a physical injury prevention course approved by the Department of Health (DOH).

The bill defines the terms "athletics personnel" and "high-risk youth athletic activity," sets timeframes for which the course must be completed, allows unpaid or volunteer athletics personnel to take the course online or in-person without being charged a fee, specifies information that must be included in the course, and requires that the entity maintain records of course completion for the entirety of an individual's service as unpaid or volunteer athletics personnel.

The bill provides that an athletic trainer licensed under ch. 468, F.S., is exempt from this course requirement. The DOH is required to adopt rules necessary to implement this section.

The bill amends the Education Code requirement in s. 1012.55, F.S., to require that an athletic coach in any public school in the state must hold and maintain a certification in cardiopulmonary resuscitation (CPR), first aid, and the use of an automatic external defibrillator (AED). The certificate must be consistent with national, evidence-based emergency cardiovascular care guidelines to be employed and render services.

The bill provides an effective date of July 1, 2024.

II. Present Situation:

Health Benefits of Organized Sports

Organized sports are activities run by a school or community that result in higher levels of activity when compared to children involved in self-organized play. Typically, organized sports meet multiple times per week and are led by a coach and other athletics personnel. The advantage of a coach is that he or she often provides high-intensity training without causing injury. Therefore, involvement in an organized sport may increase the hours per week children exercise, the intensity of the activity, and a child's future commitment and propensity to remain fit and healthy.¹

Regular physical activity trains the cardiovascular system (CVS) to deliver oxygen to cells more efficiently. Children involved in consistent activity, such as organized sports, perform better on CVS tests, and researchers have found a positive correlation to improved academic performance, social and emotional wellbeing, as well as healthier adulthoods with increased lifespans.²

Research has also shown that physical activity leads to denser, stronger bones, and provides many mental health benefits, such as improved self-esteem, social acceptance, and exercise self-efficacy. As a result, participation in organized sports can help build perseverance and self-image, provide a social support network, and teach instrumental coping strategies.³

Cardiopulmonary Resuscitation, First Aid, and Automatic External Defibrillation

Many types of injuries and illnesses can occur when participating in organized sports, including sudden cardiac arrest. While rare in young, healthy athletes, it can happen, and preparation via an emergency action plan, as well as required coursework and training is pivotal in preparing coaches, parents and other athletics personnel or staff to respond in the most effective way to save lives.⁴

Cardiopulmonary resuscitation (CPR) is an emergency lifesaving procedure performed when the heart stops beating. Immediate CPR can double or triple chances of survival after cardiac arrest by keeping the blood flow active until the arrival of trained medical staff.⁵

First aid refers to medical attention that is usually administered immediately on-site after the injury occurs. It often consists of a one-time, short-term treatment and requires little technology or training to administer. First aid can include cleaning minor cuts, scrapes, or scratches; treating

¹ Frontiers for Young Minds, *What Are the Health Benefits of Organized Sports?, available at* <u>https://kids.frontiersin.org/articles/10.3389/frym.2022.817366#:~:text=Organized%20sports%20are%20activities%20run,get</u> %20involved%20with%20these%20teams, (last visited Jan. 24, 2024).

 $^{^{2}}$ Id.

 $^{^{3}}$ Id.

⁴ Atlantic Health System, *How to Be Better Prepared at a Child's Sporting Event, available at* <u>https://www.atlantichealth.org/about-us/stay-connected/news/content-central/2023/cardiac-arrest-kids-sports.html</u> (last visited Jan. 25, 2024).

⁵ American Heart Association Emergency Cardiovascular Care, *What is CPR?, available at* <u>https://cpr.heart.org/en/resources/what-is-cpr</u> (last visited Jan. 25, 2024).

a minor burn; applying bandages and dressings; the use of non-prescription medicine; draining blisters; removing debris from the eyes; massage; and drinking fluids to relieve heat stress.⁶

An automated external defibrillator (AED) is a lightweight, portable device. It delivers an electric shock through the chest to the heart when it detects an abnormal rhythm and changes the rhythm back to normal.⁷ AEDs can greatly increase a cardiac arrest victim's chances of survival.⁸ Although formal AED training isn't required, it's recommended to increase the confidence level of the user, promoting better outcomes.⁹

Student Extracurricular Activities and Athletics Legislation

Currently, the Education Code provides that each public school that is a member of the Florida High School Athletic Association (FHSAA) must have an operational AED on school grounds. The AED must be available in a clearly marked and publicized location for each athletic contest, practice, workout, or conditioning session, including those conducted outside of the school year. Public and private partnerships are encouraged to cover the cost associated with the purchase, placement, and training in the use of the AED.¹⁰

Under current law, an FHSAA member school employee or volunteer with current training in CPR and use of an AED must be present at each athletic event during and outside of the school year, including athletic contests, practices, workouts, and conditioning sessions. The training must include completion of a course in CPR or a basic first aid course that includes CPR training, and demonstrated proficiency in the use of an AED. Each employee or volunteer who is reasonably expected to use an AED must complete this training.¹¹

The location of each AED must be registered with a local emergency medical services medical director. Each employee or volunteer required to complete the training must annually be notified in writing of the location of each AED on school grounds.¹² Immunity from civil liability for the use of AEDs by employees and volunteers is covered under the Good Samaritan Act¹³ and the Cardiac Arrest Survival Act.^{14,15}

In order to better protect student athletes participating in athletics during hot weather and avoid preventable injury or death, the state of Florida requires that the FHSAA:¹⁶

• Make training and resources available to each member school for the effective monitoring of heat stress.

⁶ Occupational Safety and Health Administration, *What is First Aid?, available at* <u>https://www.osha.gov/medical-first-aid/recognition</u> (last visited Jan. 25, 2024).

⁷ American Heart Association, *What Is an Automated External Defibrillator?*, available at <u>https://www.heart.org/-/media/files/health-topics/answers-by-heart/what-is-an-aed.pdf</u> (last visited Jan. 25, 2024).

⁸ Supra note 5.

⁹ Supra note 7.

¹⁰ Section 1006.165(1)(a), F.S.

¹¹ Section 1006.165(1)(b), F.S.

¹² Section 1006.165(c), F.S.

¹³ Section 768.13, F.S.

¹⁴ Section 768.1325, F.S.

¹⁵ Section 1006.165(d), F.S.

¹⁶ Section 1006.165(2)(a), F.S.

- Establish guidelines for monitoring heat stress and identify heat stress levels at which a school must make a cooling zone available for each outdoor athletic contest, practice, workout, or conditioning session. Heat stress must be determined by measuring the ambient temperature, humidity, wind speed, sun angle, and cloud cover at the site of the athletic activity.
- Require member schools to monitor heat stress and modify athletic activities, including suspending or moving activities, based on the heat stress guidelines.
- Establish hydration guidelines, including appropriate introduction of electrolytes after extended activities or when a student participates in multiple activities in a day.
- Establish requirements for cooling zones, including, at a minimum, the immediate availability of cold-water immersion tubs or equivalent means to rapidly cool internal body temperature when a student exhibits symptoms of exertional heat stroke and the presence of an employee or volunteer trained to implement cold-water immersion.
- Require each school's emergency action plan, as required by the FHSAA, to include a procedure for onsite cooling using cold-water immersion or equivalent means before a student is transported to a hospital for exertional heat stroke.

The state also requires that each athletic coach and sponsor of extracurricular activities involving outdoor practices or events shall annually complete training in exertional heat illness identification, prevention, and response, including effective administration of cooling zones. This requirement applies to all public K-12 schools, not just those that are members of the FHSAA.¹⁷

As required by law, the FHSAA has guidelines to educate athletic coaches, officials, administrators, and student athletes and their parents of the nature and risk of concussion and head injury.¹⁸

While current law does promote the safety and well-being of Florida students, the majority of the language is limited in scope as it is only applicable to children in a high school that is a member of the FHSAA, unless otherwise indicated.

Sports-Related Illness & Injuries

Traumatic Brain Injuries

According to the federal Centers for Disease Control and Prevention, there are an estimated 1.7 to 3.8 million traumatic brain injuries (TBIs) each year in the United States, of which 10 percent happen due to sports and recreational activities. Among American children and adolescents, sports and recreational activities contribute to over 21 percent of all TBIs.¹⁹

A TBI is defined as a form of acquired brain injury from a blow or jolt to the head or a penetrating head injury that disrupts the normal function of the brain. TBI can result when the

¹⁷ Section 1006.165(2)(b), F.S.

¹⁸ Section 1006.20(2)(j), F.S.

¹⁹ American Association of Neurological Surgeons, *Sports-related Head Injury, available at* <u>https://www.aans.org/en/Patients/Neurosurgical-Conditions-and-Treatments/Sports-related-Head-Injury#:~:text=Concussions%20frequently%20affect%20athletes%20in,to%20nerve%20fibers%20and%20neurons</u>. (last visited Jan. 25, 2024).

head suddenly and violently hits an object, or when an object pierces the skull and enters brain tissue. Symptoms of a TBI can be mild, moderate, or severe, depending on the extent of damage to the brain. Mild cases may result in a brief change in mental state or consciousness, while severe cases may result in extended periods of unconsciousness, coma, or death. Individuals with TBI may experience one or more of the following:²⁰

- Constant or recurring headache.
- Inability to control or coordinate motor functions, or disturbance with balance.
- Changes in ability to hear, taste or see; dizziness; and/or hypersensitivity to light or sound.
- Agitation; confusion; shortened attention span; easily distracted; overstimulated by environment; difficulty following directions or understanding information; feeling of disorientation and confusion; and other neuropsychological deficiencies.
- Difficulty finding the "right" word; difficulty expressing words or thoughts; and/or dysarthria or slurred speech.

A sports-related concussion is a TBI induced by biomechanical forces, such as high-risk youth athletic activities, which alters mental status. A concussion may result from shaking the brain within the skull and, if severe, can cause shearing injuries to nerve fibers and neurons. Several common features that may be utilized in clinically defining the nature of a concussive head injury include:²¹

- Sports-related concussion may be caused either by a direct blow to the head, face, neck or elsewhere on the body with an "impulsive" force transmitted to the head.
- Sports-related concussion typically results in the rapid onset of short-lived impairment of neurological function that resolves spontaneously. However, in some cases, signs and symptoms evolve over a number of minutes to hours.
- Sports-related concussion may result in neuropathological changes, but the acute clinical symptoms largely reflect a functional disturbance rather than a structural injury and, as such, no abnormality is seen on standard structural neuroimaging studies.
- Sports-related concussion results in a range of clinical symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive symptoms typically follow a sequential course but can be prolonged.

According to U.S. Consumer Product Safety Commission data, there were an estimated 454,407 sports-related head injuries treated at U.S. hospital emergency rooms in 2018.²² The following

https://www.aans.org/en/Patients/Neurosurgical-Conditions-and-Treatments/Sports-related-Head-Injury#:~:text=Concussions%20frequently%20affect%20athletes%20in,to%20nerve%20fibers%20and%20neurons. (last visited Jan. 25, 2024).

 $^{^{20}}$ *Id*.

 $^{^{21}}$ *Id*.

²² The actual incidence of head injuries may potentially be much higher for two primary reasons. In the 2018 report, the CPSC excluded estimates for product categories that yielded 1,200 injuries or less, those that had very small sample counts and those that were limited to a small geographic area of the country. Additionally, the system does not track many less severe head injuries treated at physicians' offices, immediate care centers, or are self-treated. Sports/recreational activities, in addition to the equipment and apparel used in these activities are included in these statistics. For example, swimming-related injuries include the activity as well as diving boards, equipment, flotation devices, pools, and water slides. *See* American Association of Neurological Surgeons, *Sports-related Head Injury, available at*

sports or recreational activities represent the categories contributing to the highest number of estimated head injuries treated in U.S. hospital emergency rooms in 2018:²³

- Cycling: 64,411
- Football: 51,892
- Playground equipment: 38,915
- Basketball: 38,898
- Exercise and exercise equipment: 37,045
- Powered recreational vehicles: 30,222
- Soccer: 26,955
- Baseball and softball: 24,516
- Rugby, lacrosse, and other miscellaneous ball games: 10,901
- Skateboards: 10,573
- Trampolines: 8,956
- Hockey: 7,668
- Skating: 7,143
- Golf: 6,357
- Horseback riding: 6,141

The top 10 sports-related head injury categories among children ages 14 and younger are as follows:²⁴

- Playground equipment: 35,058
- Football: 31,277
- Basketball: 20,242
- Cycling: 19,921
- Soccer: 12,709
- Baseball and softball: 12,065
- Swimming: 9,265
- Trampolines: 7,921
- Powered recreational vehicles: 6,036
- Skateboards: 3,101

Heat-Related Illness

Heat-related illnesses are a real concern for young athletes who may be unaware of the signs or symptoms, to include $^{\rm 25}$

• Heat exhaustion is the inability to continue exercise due to the heat. An athlete with heat exhaustion may present with pale skin, muscle cramps, weakness, dizziness, headache or nausea. It is important to get the athlete to a shaded area and place cool towels or bags of ice on their body. Cool water immersion is the quickest way to bring an athlete's temperature down. Heat exhaustion that goes untreated can progress to heat stroke.

²³ Id.

²⁴ Id.

²⁵ University of Florida Health, *Sports Injury Education and Prevention: Concussions, Heat Illness and Sudden Cardiac Death, available at* <u>https://ufhealth.org/stories/2022/sports-injury-education-and-prevention-concussions-heat-illness-and-sudden-cardiac-death</u> (last visited Jan. 25, 2024).

Heat stroke is a central nervous system dysfunction caused by a core body temperature above 104 degrees Fahrenheit. It may present as a subtle behavioral change, such as an athlete being more combative or acting differently than usual, or symptoms can be severe, resulting in seizures, hallucinations, or collapse.

Injuries Related to Cold Weather

When the weather is cold, the body will do whatever it takes to ensure consistent core body temperature, limiting blood flow and allowing the limb muscles to lose the most heat. This internal regulation process makes the muscles in the legs and arms more prone to injury in cold weather. Since muscular contraction and nerve impulses require a string of complex chemical reactions that occur more slowly under cooler conditions, the muscles perform less efficiently in the cold. Less efficient muscles and a slower reaction time can lead to higher rates of injury in the cold, especially during high-risk youth athletic activities.²⁶

Without their usual quickness or elasticity, the muscles, tendons, and ligaments are at a higher risk for strains, pulls, tears and other types of injury, which cause conditions that could lead to pinched nerves. Cold weather may also exacerbate existing injuries by causing an already bothersome muscle or tendon to tense up or tighten. Athletes easily overexert themselves in colder conditions, and exhaustion results in muscle fatigue, which makes the body more vulnerable to joint injuries and muscle strains. Shivering tends to be the earliest sign of potentially dangerous cold exposure.²⁷

Sports-Related Injury Prevention

Over the past decade, there have been a growing number of youths participating in organized sports, both recreationally and competitively. Although this increase coincides with national health initiatives directed at improving general health and increasing physical activity, epidemiological data reflect a worrisome increase in youth sports-related injuries. In the U.S., sports-related injuries account for an estimated 2.6 million visits to the emergency room by children (aged 5-18 years) and young adults (aged 19-24 years). According to Fair and Champa, the estimated economic cost per year among high school athletes for injuries related to contact sports alone is between \$5.4 and \$19.2 billion.²⁸

Currently, the application of exercise-based injury prevention programs may reduce injury rates by up to 46 percent in organized youth sports. This suggests an important need to prioritize sports injury prevention among youth athletes by promoting training or supplying information regarding appropriate conditioning, heat-related illness, injury prevalence due to extreme weather, head injury, first aid, CPR, and the use of an AED.²⁹

²⁶ Mufaddal Gombera, MD – Orthopedic Surgery & Sports Medicine, How Cold Weather Affects Sports Injuries / Dr. Gombera MD, available at https://www.gomberamd.com/blog/how-cold-weather-affects-sports-injuries-23105.html (last visited Jan. 25, 2024).

²⁷ Id.

²⁸ Hanlon, C., Krzak, J. J., Prodoehl, J., & Hall, K. D. (2020), Effect of Injury Prevention Programs on Lower Extremity Performance in Youth Athletes: A Systematic Review. Sports health, 12(1), 12–22., available at https://doi.org/10.1177/1941738119861117 (last visited Jan. 25, 2024).

In the State of Florida, a licensed athletic trainer must meet the minimum requirements for safe practice established inch.468 (part XIII), F.S., including the education requirements established by the Commission on Accreditation of Athletic Training Education or its successor organization and necessary credentials from the Board of Certification. Currently, the state requires that any person desiring to be licensed by the DOH as an athletic trainer must have current certification in both CPR and the use of an AED.³⁰

III. Effect of Proposed Changes:

Section 1 creates s. 381.796, F.S., to require that any unpaid or volunteer athletics personnel of an entity that administers or conducts a high-risk youth athletic activity, or training for such activity, on land owned, leased, operated, or maintained by the state or a political subdivision of the state, must complete a physical injury prevention course approved by the DOH, promoting safety for all Florida children under 14 years of age involved in these activities. The course must be completed within 30 days after the athletics personnel's initial involvement with the high-risk youth athletic activity and must be completed annually thereafter.

The bill defines "athletics personnel" as an individual who is actively involved in organizing, conducting, or coaching a high-risk youth athletic activity or an individual involved with training a child for participation in a high-risk youth athletic activity.

The bill defines "high-risk youth athletic activity" to mean any organized sport for children 14 years of age or younger in which there is a significant possibility for the child to sustain a serious physical injury. The term includes, but is not limited to, the sports of football, basketball, baseball, volleyball, soccer, ice or field hockey, cheerleading, and lacrosse.

The bill provides that the course may be offered online or in-person, and athletics personnel may not be charged any fee relating to the course. The course must include information on all of the following:

- Emergency preparedness, planning, and rehearsal in relation to traumatic injuries.
- Concussions and head trauma.
- Injuries resulting from heat and extreme weather.
- Physical conditioning and the proper use of training equipment.

The bill requires that the specified entity maintain a record of each athletics personnel who completes the course for the entirety of his or her service as an unpaid or volunteer athletics personnel.

The bill exempts athletic trainers licensed under ch. 468, F.S., from this section, and requires the DOH to adopt any rules necessary to implement this section.

Section 2 amends s. 1012.55, F.S., to require that a Florida public school athletic coach must hold and maintain a certification in CPR, first aid, and the use of an AED. The certification must

³⁰ Chapter 468, Part XIII, F.S.

be consistent with national, evidence-based emergency cardiovascular care guidelines for the coach to be employed and render services.

Section 3 provides an effective date of July 1, 2024.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

Since unpaid or volunteer athletics personnel cannot be charged a fee under the bill for the newly required coursework, a private entity that administers or conducts high-risk activities covered under the bill may incur the related costs.

C. Government Sector Impact:

Public entities that administer or conduct high-risk activities covered under the bill may incur the costs of providing the coursework, similar to private entities.

VI. Technical Deficiencies:

None.

VII. Related Issues:

The bill could operationally affect both the private and government sectors. It is possible that impacted entities could experience a loss of unpaid or volunteer athletics personnel who do not wish to complete the coursework required under the bill.

VIII. Statutes Affected:

This bill creates section 381.796 of the Florida Statutes.

This bill substantially amends section 1012.55 of the Florida Statutes.

IX. Additional Information:

A. Committee Substitute – Statement of Changes: (Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

B. Amendments:

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.