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 By: The Professional Staff of the Committee on Education

BILL:	CS/SB 1696
INTRODUCER:	Senator Perry
SUBJECT:	Student Athletes
DATE:	January 27, 2020
REVISED:	

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Dew	Sikes	ED	**Fav/CS**
2.			AED	
3.			AP	

Please see Section IX. for Additional Information:

COMMITTEE SUBSTITUTE - Substantial Changes

I. Summary:

CS/SB 1696 adds requirements to protect students participating in extracurricular activities and athletics. Specifically, the bill requires:

- Each Florida High School Athletic Association (FHSAA) member public school to make its automated external defibrillator (AED) available in a clearly marked and publicized location for each athletic contest, practice, workout, or conditioning session.
- A school employee or volunteer with current training in cardiopulmonary resuscitation and use of an AED, beginning June 1, 2021, to be present at each athletic event, practice, workout, or conditioning session during and outside of the school year.
- All employees or volunteers expected to use an AED to complete the training and be notified annually of the location of each AED on school grounds.
- The FHSAA to make training and resources to monitor heat stress available to each member school.
- Each school's emergency action plan to include a procedure for onsite cooling using cold-water immersion.
- Athletic coaches and sponsors of outdoor extracurricular activities to complete annual exertional heat illness training, including administration of cooling zones.
- Students involved in interscholastic athletics to pass a medical evaluation prior to participating in relevant activities outside of the school year.

The bill takes effect July 1, 2020.

II. Present Situation:

Exertional Heat Stroke (EHS)

Exertional heat stroke (EHS), the most severe form of heat illness,[1] is associated with sustained high body temperature resulting from dehydration, strenuous exercise, and environmental heat exposure.[2] If not promptly recognized and treated, EHS can progress to multi-organ system failure and death.[3] EHS remains one of the leading causes of sudden death in athletics[4] despite evidence showing a 100 percent survival rate when an athlete is cooled down to an appropriate core body temperature within the first 10 minutes of collapsing.[5] Research shows that the best practice for rapid cooling treatment is cold water immersion, preferably in a cooling zone,[6] in a tub that is filled with water and ice to lower the athlete's core body temperature.[7] High school athletic associations in states such as Arkansas, Georgia, Hawaii, Idaho, Kentucky, Mississippi, New Jersey, North Carolina, Utah, and Vermont require schools to have cold water immersion tubs for onsite cooling for all practices that take place in warm weather.[8]

Since 1995, 64 football players have died nationally from EHS, 47 of which occurred at the high school level.[9] Ninety percent of recorded EHS deaths have occurred during practice.[10] From 2014-2018, there was an average of 2.2 EHS deaths per year associated with football.[11]

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[1] University of Connecticut, Korey Stringer Institute, *Heat Illnesses*, https://ksi.uconn.edu/emergency-conditions/heat-illnesses/ (last visited Dec. 4, 2019). Heat illnesses are a spectrum of illnesses that occur due to heat exposure. This heat exposure can come from either environmental heat (air temperature) or intense exercise. Such conditions include heat cramps, heat exhaustion, and heat syncope (orthostatic dizziness).

[2] Office of Program Policy Analysis and Government Accountability, *Prevention and Treatment of Exertional Heat Illness: Presentation to the House PreK-12 Innovation Subcommittee* (Oct. 23, 2019), *available at* https://www.myfloridahouse.gov/Sections/Documents/loaddoc.aspx?PublicationType=Committees&CommitteeId=3017&Session=2020&DocumentType=Meeting Packets&FileName=pki 10-23-19.pdf [hereinafter *OPPAGA Presentation*].

[3] *Id.*

[4] William M. Adams, *Exertional Heat Stroke within Secondary School Athletics*, Current Sports Medicine Reports (April 2019), American College of Sports Medicine, *available at* https://journals.lww.com/acsm-csmr/Fulltext/2019/04000/Exertional_Heat_Stroke_within_Secondary_School.13.aspx#pdf-link [hereinafter *Exertional Heat Stroke within Secondary School Athletics*].

[5] *OPPAGA Presentation*, *supra* note 2, at 17.

[6] Florida High School Athletic Association, *Administrative Policies of the Florida High School Athletic Association* (April 29, 2019), at 107, *available at* https://www.fhsaa.org/sites/default/files/attachments/2010/09/16/node-235/1920_handbook_policies_website_116.pdf [hereinafter *Administrative Policies of the Florida High School Athletic Association*]. A cooling zone is an area identified for rest out of direct sunlight. It should include ice sponges and towels, cold water immersion tubs, tarps that can be filled with ice and wrapped around an athlete, and other cooling alternatives to facilitate the cooling process.

[7] *OPPAGA Presentation*, *supra* note 2, at 17; *Exertional Heat Stroke within Secondary School Athletics*, *supra* note 4.

[8] University of Connecticut, Korey Stringer Institute, *State High School Sports Safety Policies*, https://ksi.uconn.edu/high-school-state-policies-2-2-2/ (last visited Dec. 4, 2019) [hereinafter *State High School Sports Safety Policies*].

[9] National Center for Catastrophic Sports Injury Research, *Annual Survey of Football Injury Research 2018* (Feb. 15, 2019), *available at* https://nccsir.unc.edu/files/2019/02/Annual-Football-2018-Fatalities-FINAL.pdf [hereinafter *Annual Survey of Football Injury Research*].

[10] *Id.*

[11] *Id.*

Florida leads the nation in high school student athlete deaths from EHS, with four since 2011.[12] Over 460 student athletes were treated for exertional heat illness during the 2017-2018 school year.[13]

Environmental Monitoring and Hydration

The National Federation of State High School Associations Sports Medicine Advisory Committee has published a position statement regarding best practices for maintaining hydration and minimizing risk for EHS.[14] These include drinking water regularly throughout all athletic activity and weighing athletes before and after hot weather athletic activities to assess the change in hydration status of each athlete.[15]

Adjusting and modifying athletic activity levels based on environmental conditions is a best practice for preventing EHS in athletes.[16] The FHSAA requires:[17]

- Member schools to follow a preseason acclimatization and recovery model for all sports;
- Individual schools or districts to select and promote a method of environmental monitoring for use outside the acclimatization period; and
- Staff to comply with standard recommendations for practice modifications.

Automated External Defibrillators (AEDs)

Florida law requires each public school member of the FHSAA to have an operational automated external defibrillator (AED) on school grounds.[18] Each school must ensure that all employees or volunteers who are reasonably expected to use the device obtain appropriate training, including completion of a course in cardiopulmonary resuscitation (CPR) or a basic first aid course that includes CPR training, and demonstrated proficiency in the use of an AED.[19] The location of each AED must be registered with a local emergency medical services medical director.[20]

The Florida High School Athletic Association (FHSAA)

The FHSAA is designated by Florida law as the governing nonprofit organization of athletics in Florida public schools.[21] The FHSAA is tasked with adopting bylaws that establish eligibility requirements for all students who participate in high school athletic competition in FHSAA

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[12] Laurence Reisman, *Heat-related football deaths: Florida high schools must do more, mourning Sebastian parents say*, TCPalm, Aug. 31, 2018, *available at* https://www.tcpalm.com/story/opinion/columnists/laurence-reisman/2018/08/31/fhsaa-heat-stroke-preventable-shogran-sebastian-river-korey-stringer-riverdale-football-collapse/1136460002/.
[13] *OPPAGA Presentation*, *supra* note 2, at 23.
[14] National Federation of State High School Associations Sports Medicine Advisory Committee, *Position Statement and Recommendations for Maintaining Hydration to Optimize Performance and Minimize the Risk for Exertional Heat Illness* (October 2018), available at https://www.nfhs.org/media/1014751/nfhs-hydration-position-statement-final-april-2018.pdf.
[15] *Id.*; *Annual Survey of Football Injury Research*, *supra* note 9, at 18.
[16] *Id.*; *Annual Survey of Football Injury Research*, *supra* note 9, at 17; *Exertional Heat Stroke within Secondary School Athletics*, *supra* note 4.
[17] *Administrative Policies of the Florida High School Athletic Association*, *supra* note 6, at 105 and 107.
[18] Section 1006.165, F.S.
[19] *Id.*
[20] *Id.*
[21] Section 1006.20(1), F.S.

member schools.[22] The FHSAA requires all student athletes to satisfactorily pass a medical evaluation each year before participating in interscholastic athletic activity.[23]

The FHSAA does not require its member schools to have devices and equipment available to effectively respond to and prevent EHS in student athletes.[24] Current FHSAA policies also do not require member schools to:[25]

- Regulate summer athletic activity, with the exception of football;[26]
- Establish or adopt hydration guidelines;
- Have cooling zones with cold water immersion tubs or other cooling materials;
- Have an individual trained in CPR and AED present at athletic activities; or
- Ensure an AED is present at all athletic activities, preseason or regular.

III. Effect of Proposed Changes:

CS/SB 1696 adds requirements to protect students participating in extracurricular activities and athletics. Specifically, the bill requires:

- Each Florida High School Athletic Association (FHSAA) member public school to make its automated external defibrillator (AED) available in a clearly marked and publicized location for each athletic contest, practice, workout, or conditioning session.
- A school employee or volunteer with current training in cardiopulmonary resuscitation and use of an AED, beginning June 1, 2021, to be present at each athletic event, practice, workout, or conditioning session during and outside of the school year.
- All employees or volunteers expected to use an AED to complete the training and be notified annually of the location of each AED on school grounds.
- The FHSAA to make training and resources to monitor heat stress available to each member school.
- Each school's emergency action plan to include a procedure for onsite cooling using cold-water immersion.
- Athletic coaches and sponsors of outdoor extracurricular activities to complete annual exertional heat illness training, including administration of cooling zones.
- Students involved in interscholastic athletics to pass a medical evaluation prior to participating in relevant activities outside of the school year.

The bill requires the FHSAA to put measures in place to protect student athletes year round. These measures include:

- Making training and resources available to each member for the effective monitoring of heat stress.

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[22] Section 1006.20(2)(a), F.S.
[23] Section 1006.20(2)(c), F.S.
[24] *OPPAGA Presentation*, *supra* note 2, at 12.
[25] *Administrative Policies of the Florida High School Athletic Association*, *supra* note 6, at 105 and 107-108.
[26] *See* FHSAA, *Heat Acclimatization and Football Contact Procedures*, https://www.fhsaa.org/sites/default/files/orig_uploads/sports/football/archives/2018-19/heat_acclimatization_and_football_contact_procedures.pdf (last visited Jan. 21, 2020). Recommendations are also included for individuals participating in cross country or in sports utilizing helmets. *Id.* FHSAA recommendations are not requirements under Florida law.

- Establishing 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.
- Requiring member schools to determine heat stress levels based on measuring ambient temperature, humidity, wind speed, sun angle, and cloud cover at the site of the athletic activity and modify athletic activities accordingly, including suspending or moving activities, based on the heat stress guidelines.
- Establishing hydration guidelines, including appropriate introduction of electrolytes after extended activities or when a student participates in multiple athletic activities in a day.
- Establishing 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 for the presence at athletic activities of an employee or volunteer trained to implement and administer the cooling zones.
- Requiring each school's emergency action plan, as stipulated 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 bill requires all athletic coaches and sponsors of extracurricular activities involving outdoor practices or events to complete annual training in exertional heat illness identification, prevention, and response, including effective administration of cooling zones.

The bill expands FHSAA bylaws to require all students participating in or who are candidates for interscholastic athletic involvement to satisfactorily pass a medical evaluation yearly prior to participating in conditioning or activities that occur outside of the school year.

These safeguards may protect student athletes and prevent heat-related illness or death.

The bill takes effect July 1, 2020.

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:

None.

C. Government Sector Impact:

The bill has an indeterminate fiscal impact on Florida High School Athletic Association member schools for costs associated with the purchase of automated external defibrillators (AEDs) and cold water immersion tubs, as necessary, and having an individual with current cardiopulmonary resuscitation and AED training at each athletic activity, including those that take place in the non-school year.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill substantially amends the following sections of the Florida Statutes: 1006.165 and 1006.20.

IX. Additional Information:

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

CS by Education on January 27, 2020:
The committee substitute alters Florida High School Athletic Association (FHSAA) requirements through:

- Requiring FHSAA member schools to determine heat stress levels based on measuring ambient temperature, humidity, wind speed, sun angle, and cloud cover at the site of the athletic activity, instead of specifying WetBulb Globe Temperature (WBGT) or heat index levels; and
- Removing the requirement that the FHSAA notify member schools in writing within 30 days with a rationale for not adopting the policy recommendation as recommended

by the Sports Medicine Advisory Committee (SMAC) when the FHSAA does not adopt a policy change.

The committee substitute also requires each school's emergency action plan to align with FHSAA specifications on procedure for onsite cooling using cold-water immersion or equivalent means before a student is transported to a hospital for exertional heat stroke.

B. Amendments:

None.