

Student Sports - Concussions**Student Sports – Concussions**

The Board of Education recognizes that concussions and head injuries may occur for children and adolescents who participate in sports and other recreational activities. The Board acknowledges the risk of catastrophic injuries or deaths are significant when a concussion or head injury is not properly evaluated and managed.

Any coach of intramural or interscholastic athletics employed by the District shall complete an initial training course, approved by the State Board of Education (which is developed in consultation with, among others, the State Department of Health and the CIAC), regarding concussions prior to commencing the coaching assignment for the season. Such training course shall include, but not be limited to (1) the recognition of the signs and symptoms of a concussion; (2) the means of obtaining proper medical treatment for a person suspected of having a concussion; (3) the nature and risk of concussions, including the danger of continuing to engage in athletic activity after sustaining a concussion; and (4) the proper method of allowing a student athlete who has sustained a concussion to return to athletic activity.

Each school year, any coach who has completed the initial training course regarding concussions shall annually review current and relevant information, developed or approved by the State Board of Education regarding concussions prior to the start of the coaching assignment. This annual review is not required in any year the coach is required to complete a refresher course, as set forth below.

Beginning July 15, 2015, and each school year thereafter, a coach must complete an approved refresher course not later than five years after the initial training course in order to maintain his/her coaching permit and to coach in the District. Such refresher course shall include, but not be limited to: an overview of key recognition and safety practices; an update on medical developments and current best practices in the field of concussion research, prevention and treatment and an update on new relevant federal, state and local laws and regulations. Such coach shall thereafter retake such refresher course at least once every five years as a condition of the reissuance of a coaching permit to such coach.

Commencing July 1, 2015, and each year thereafter, the District shall prohibit a student athlete from participating in any intramural or interscholastic activity unless the student athlete and a parent or guardian of such student athlete (1) reads written materials, (2) views online training or videos or (3) attends in-person training regarding the concussion education plan developed or approved by the State Board of Education.

Commencing July 1, 2015, and each school year thereafter, the District shall provide each participating student athlete's parent or guardian with a copy of the informed consent form developed or approved by the State Board of Education. Such informed consent form shall include, at a minimum, (1) a summary of the concussion education plan developed or approved by the State Board of Education, and (2) a summary of the District's policies regarding concussions. The District must obtain the parent or legal guardian's signature, attesting to the fact that such parent

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or legal guardian has received a copy of such form and authorizes the student athlete to participate in the athletic activity.

The coach of any intramural or interscholastic athletics shall immediately remove a student athlete from participating in any intramural or interscholastic athletic activity who (1) is observed to exhibit signs, symptoms or behaviors consistent with a concussion following an observed or suspected blow to the head or body or (2) is diagnosed with a concussion, regardless of when such concussion may have occurred. Upon such removal, the coach or another qualified school employee (principal, teacher, licensed athletic trainer, licensed physical or occupational therapist employed by the District, or school paraprofessional), shall notify the student athlete's parent or legal guardian that the student athlete has exhibited such signs, symptoms, or behaviors consistent with a concussion or has been diagnosed with a concussion. Such qualified school employee shall provide such notification not later than 24 hours after such removal and shall make a reasonable effort to provide such notification immediately after such removal.

The coach shall not permit such student athlete to participate in any supervised team activities involving physical exertion, including, but not limited to, practices, games or competitions, until such student athlete receives written clearance to participate in such supervised team activities involving physical exertion from a licensed health care professional trained in the evaluation and management of concussions.

Following clearance outlined above, the coach shall not permit such student athlete to participate in any full, unrestricted supervised team activities without limitations on contact or physical exertion, including, but not limited to, practices, games, or competitions, until such student athlete (1) no longer exhibits signs, symptoms or behaviors consistent with a concussion at rest or with exertion and (2) receives written clearance to participate in such full, unrestricted supervised team activities from a licensed health care professional trained in the evaluation and management of concussions.

Legal Reference:

Connecticut General Statutes
10-149b
10-149c
Public Act 14-66 An Act Concerning Youth Athletics and Concussions.

Students 5141.7

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STUDENTS 5141.7

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Duties of the Administrator in Charge of Athletics:

1. Annually, by April 1st, review with the School Medical Advisor and Athletic Director any changes or requirements that have been made regarding the management of concussion and head injuries.
2. By the conclusion of the school year, identify the competitive sport activities in the District for which compliance with the concussion policy is required. A list of competitive sports activities and the District's policy and procedures will be distributed to all members of the coaching staff.
3. Responsible for determining that all coaches have fulfilled the required initial training and follow-up and refresher courses regarding concussions prior to the coach's appointment.

Training of Coaches

All coaches shall undergo training (including follow-up and refresher courses) in head injuries and concussion management as required by state statute in a program approved by the State Board of Education. The Connecticut State Board of Education's "*Concussion Education Plan and Guidelines for Connecticut Schools*" provides guidance on this topic. In addition, the Centers for Disease Control and Prevention ("CDC") has made available materials, entitled, "*Heads Up Concussion in High School Sports*", which can provide additional information for coaches, athletes and parents.

Parent/Student Information Sheet

Annually, a concussion consent and information sheet shall be signed and returned by the student athlete and the parent/guardian prior to the student athlete's participation in practice or competition. This information sheet will be incorporated into the parent permission sheet which permits students to participate in extracurricular activities. Beginning with the school year commencing July 1, 2015, the District will utilize the informed consent form developed or approved and made available by the State Board of Education.

Coaches Responsibility

1. Based upon the circumstances of injury, observation, history, and unusual behavior and reactions of the athlete, even without loss of consciousness, assume a concussion has occurred if the head was hit and even the mildest of symptoms occur. The student athlete who is suspected of sustaining a concussion in a practice or game shall be immediately removed from play.

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2. If confusion, unusual behavior or responsiveness, deteriorating condition, loss of consciousness, or concern about neck and spine injury exists, the athlete should be referred immediately for emergency care.
3. If no emergency is apparent, the athlete should be monitored every 5 to 10 minutes regarding mental status, attention, balance, behavior, speech, and memory until stable over a few hours. If appropriate medical care is not available, an athlete even with mild symptoms should be sent for medical evaluation.
4. Upon removal from the athletic activity, the coach or other qualified school employee (principal, teacher, licensed athletic trainer, licensed physical or occupational therapist employed by the District, or school paraprofessional) shall notify the athlete's parent/guardian that the student athlete has exhibited signs, symptoms or behaviors consistent with a concussion or has been diagnosed with a concussion. Such qualified school employee shall provide such notification not later than 24 hours after such removal and shall make a reasonable effort to provide such notification immediately after such removal.
5. No athlete suspected of having a concussion should return to the same practice or contest, even if symptoms clear in 15 minutes, no sooner than 24 hours after removal and until the athlete receives written clearance from a licensed health care professional trained in evaluation and management of concussions and after the athlete and his/her parent/guardian complete the State Board of Education concussion education plan.

Return to Play After Concussion

1. A student athlete who has been removed from play may not participate in any supervised team activities involving physical exertion, including, but not limited to practices, games, or competitions, until the athlete is evaluated by a licensed health care provider trained in the evaluation and management of concussions and receives a written clearance to return to play from that health care provider.
2. After medical clearance, the return to play by the athlete should follow a step-wise protocol with provisions for delayed return to play based on return of any sign or symptoms.
3. The medical clearance return to play protocol is as follows:
 - a. No exertional activity until asymptomatic.
 - b. When the athlete appears clear, begin low-impact activity (e.g., walking, stationary bike).
 - c. Initiate aerobic activity fundamental to the specific sport (e.g., skating or running) and may also begin progressive strength training activities.
 - d. Begin non-contact skill drills specific to sport (e.g., dribbling, fielding, batting).
 - e. Full contact in practice setting.

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f. If athlete remains asymptomatic, and receives written clearance to participate in such full, unrestricted supervised team activities from a licensed health care professional trained in the evaluation and management of concussions, he/she may return to game/play.

REGION 14 STUDENT & PARENT CONCUSSION EDUCATION PLAN

This document was developed to provide coaches with an annual review of current and relevant information regarding concussions and head injuries. It includes guidance from the 2017 Concussion in Sport Group consensus statement that was developed to provide further understanding and management of sports-related concussion.

In addition to reviewing this document, the annual review must include one of the following prescribed resources: Connecticut Concussion Task Force video, Centers for Disease Control and Prevention (CDC) Heads Up: Concussion in Youth Sports training course, or the National Federation of State High School Associations (NFHS) concussion training course. Links to these resources can be found at: <http://concussioncentral.ciacsports.com/>. A new form is required to be read, signed, dated and kept on file by coaches' associated school districts annually to comply with Section 10-149b of the Connecticut General Statutes, Concussions: Training courses for coaches. Education plan. Informed consent form. Development or approval by State Board of Education. Revocation of coaching permit. Above and below are from the SDE:

https://portal.ct.gov/-/media/SDE/Board/BoardMaterials071917/Approval_of_Concussion_and_Head_Injury_Annual_Review_for_Coaches.pdf

What is a Concussion?

“A concussion is a type of traumatic brain injury, or TBI, caused by a bump, blow, or jolt to the head or by a hit to the body that causes the head and brain to move rapidly back and forth. This sudden movement can cause the brain to bounce around or twist in the skull, stretching and damaging the brain cells and creating chemical changes in the brain” (CDC, 2017).

Section 1. Concussion Education Plan Summary

The Concussion Education Plan and Guidelines for Connecticut Schools was approved by the Connecticut State Board of Education in January 2015. Below is an outline of the requirements of the Concussion Education Plan. The complete document is accessible on the CSDE website at <http://portal.ct.gov/SDE/Publications/Concussion-Education-Plan-and-Guidelines-for-Connecticut-Schools>.

Connecticut State law requires that each local and regional board of education must approve and then implement a Concussion Education Plan by using written materials, online training or videos, or in-person training that addresses, at a minimum, the following:

1. The recognition of signs or symptoms of concussion.

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2. The means of obtaining proper medical treatment for a person suspected of sustaining a concussion.
3. The nature and risks of concussions, including the danger of continuing to engage in athletic activity after sustaining a concussion.
4. The proper procedures for allowing a student athlete who has sustained a concussion to return to athletic activity.
5. Current best practices in the prevention and treatment of a concussion.

Concussion Policy and Education Plan**Section 2. Signs and Symptoms of a Concussion: Overview**

A concussion should be suspected if any one or more of the following signs or symptoms are present following an impact or suspected impact as described in the CDC definition above.

Signs of a concussion may include (i.e. what the athlete displays/looks like to an observer):

- Confusion/disorientation/irritability
- Trouble resting/getting comfortable
- Lack of concentration
- Slow response/drowsiness
- Incoherent/ slurred speech
- Slow/clumsy movements
- Loses consciousness
- Amnesia/memory problems
- Acts silly/combative/aggressive
- Repeatedly ask same questions
- Dazed appearance
- Restless/irritable
- Constant attempts to return to play
- Constant motion
- Disproportionate/inappropriate reactions
- Balance problems

Symptoms of a concussion may include (i.e. what the athlete reports):

- Headache or dizziness
- Nausea or vomiting
- Blurred or double vision
- Oversensitivity to sound/light/touch
- Ringing in ears
- Feeling foggy or groggy

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State law requires that a coach MUST immediately remove a student-athlete from participating in any intramural or interscholastic athletic activity who: a) is observed to exhibit signs, symptoms or behaviors consistent with a concussion following a suspected blow to the head or body; or b) is diagnosed with a concussion, regardless of when such concussion or head injury may have occurred. Upon removal of the athlete, a qualified school employee (principal, teacher, licensed athletic trainer, licensed physical or occupational therapist employed by a school district, coach or school paraprofessional) must notify the parent or legal guardian within 24 hours that the student-athlete has experienced a head injury and has exhibited signs and symptoms of a concussion.

Concussion Policy and Education Plan

Section 3. Return to Play (RTP) Protocol Overview

It is impossible to accurately predict how long an individual's concussion will last. There must be full recovery before a student-athlete is allowed to resume participating in athletic activity.

Connecticut law now requires that no athlete may resume participation until she/he has received written medical clearance from a licensed health care professional (physician, physician assistant, advanced practice registered nurse (APRN), athletic trainer) trained in the evaluation and management of concussions. More Information:

http://www.concussiontreatment.com/images/SCI_RTP_Illustration.pdf

Concussion Management Requirements:

- No athlete shall return to participation in the athletic activity on the same day of head injury or concussion.
- If there is any loss of consciousness, vomiting or seizures, the athlete MUST be immediately transported to the hospital.
- The athlete should not be left alone after the injury. Close observation and monitoring of an athlete MUST continue following a concussion or head injury to ensure that there is no worsening/escalation of symptoms.
- Any athlete with signs or symptoms related to a concussion MUST be evaluated by a licensed health care professional (physician, physician assistant, advanced practice registered nurse (APRN), athletic trainer) trained in the evaluation and management of concussions.
- The athlete MUST obtain an initial written clearance from one of the licensed health care professionals identified above directing her/him into a well-defined RTP stepped protocol similar to the one outlined below. If at any time signs or symptoms return during the RTP progression, the athlete should cease activity*.
- After the RTP protocol has been successfully administered (no longer exhibits any signs or symptoms or behaviors consistent with concussions), final written medical clearance is required by one of the licensed health care professionals identified above (or, if indicated, by a medical professional deemed appropriate/necessary by the school's AT) for the athlete to fully return to unrestricted participation in practices and competitions.
- Treatment for any concussion will be on an individual basis according to the athlete's symptoms and must be free of all symptoms prior to return to play.

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- With the **exception of a concussion resulting in loss of consciousness**, the athlete must be symptom free for at least 48 hours prior to beginning the outlined gradual return to play program below.
- If a concussion results in a loss of consciousness, the athlete must remain symptom free for 1 week at rest prior to beginning the gradual return to play program.
- When applicable, the athlete must also pass any neurocognitive or ImPACT test prior to return to contact.

Concussion Policy and Education Plan (Continued)

https://www.cdc.gov/headsup/providers/return_to_activities.html

Gradual Return to Play:

- The gradual return to play program will be conducted under the guidance of the ATC.
- Return to play must occur in a stepwise fashion.
- There should be approximately 24 hours (or longer) for each stage.
- If any symptoms return during any one stage the athlete should stop activity and return that stage 24 hours later (or longer).

Rehabilitation Stage	Exercise/target HR	Goal
No Activity	Complete physical and cognitive rest 30-40% max HR	Recovery
Light Aerobic exercise	Walking, swimming, stationary bike, no resistance training 40-60% max HR	Increase HR
Sport-specific exercise	Skating, running, no contact 60-80% max HR	Add movement
Non-Contact Training	Progression to complex training drills i.e. passing drill in football Resistance training 80-90% max HR	Exercise, coordination, cognitive load
Full Contact Practice	Sports specific standard training drills	Restore confidence and skill

Section 4, Head Injuries

Injuries to the head includes:

- Concussions: (See above information). There are several head injuries associated with concussions which can be severe in nature including:
 - a) Second impact Syndrome - Athletes who sustain a concussion, and return to play prior to being recovered from the concussion, are also at risk for Second Impact Syndrome

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- (SIS), a rare but life-altering condition that can result in rapid brain swelling, permanent brain damage or death; and
- b) Post-Concussion Syndrome - A group of physical, cognitive, and emotional problems that can persist for weeks, months, or indefinitely after a concussion.
 - Scalp Injury: Most head injuries only damage the scalp (a cut, scrape, bruise or swelling)... Big lumps (bruises) can occur with minor injuries because there is a large blood supply to the scalp. For the same reason, small cuts on the head may bleed a lot. Bruises on the forehead sometimes cause black eyes 1 to 3 days later because the blood spreads downward by gravity;

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- Skull Fracture: Only 1% to 2% of children with head injuries will get a skull fracture. Usually there are no other symptoms except for a headache at the site where the head was hit. Most skull fractures occur without any injury to the brain and they heal easily;

Section 4, Head Injuries (cont.)

- Brain Injuries are rare but are recognized by the presence of the following symptoms: (1) difficult to awaken, or keep awake or (2) confused thinking and talking, or (3) slurred speech, or (4) weakness of arms or legs or (5) unsteady walking (American Academy of Pediatrics – Healthy children, 2010).

References:

1. NFHS. Concussions. 2008 NFHS Sports Medicine Handbook (Third Edition). 2008: 77-82.
<http://www.nfhs.org>.
http://journals.lww.com/cjsportsmed/Fulltext/2009/05000/Consensus_Statement_on_Concussion_in_Sport_3rd.1.aspx.
2. Centers for Disease Control and Prevention. *Heads Up: Concussion in High School Sports*. http://www.cdc.gov/NCIPC/tbi/Coaches_Tool_Kit.htm.
3. CIAC Concussion Central - <http://concussioncentral.ciacsports.com/>

Resources:

- Centers for Disease Control and Prevention. *Injury Prevention & Control: Traumatic Brain Injury*. Retrieved on June 16, 2010.
<http://www.cdc.gov/TraumaticBrainInjury/index.html>
- Centers for Disease Control and Prevention. *Heads Up: Concussion in High School Sports Guide for Coaches*. Retrieved on June 16, 2014.
- SDE – Connecticut, <https://portal.ct.gov/SDE/Publications/Concussion-Education-Plan-and-Guidelines-for-Connecticut-Schools/Section-2-Concussion-Education-Plan>

For more information:

<http://www.p12.nysed.gov/sss/schoolhealth/schoolhealthservices/concussionmanageguidelines.pdf>

Student Sports - Concussions**REGION 14 STUDENT & PARENT SUDDEN CARDIAC ARREST AWARENESS PLAN**

NOTE: This document was developed to provide student-athletes and parents/guardians with current and relevant information regarding sudden cardiac arrest. A new form is required to be read, signed, dated and kept on file by the student-athlete's associated school district annually to comply with Connecticut General Statutes Chapter 163, Section 10-149f: SUDDEN CARDIAC ARREST AWARENESS EDUCATION PROGRAM.

Part I – SUDDEN CARDIAC ARREST - What is sudden cardiac arrest?

Sudden cardiac arrest (SCA) is when the heart stops beating, suddenly and unexpectedly. When this happens, blood stops flowing to the brain and other vital organs. SCA doesn't just happen to adults; it takes the lives of students, too. However, the causes of sudden cardiac arrest in students and adults can be different. A student's SCA will likely result from an inherited condition, while an adult's SCA may be caused by either inherited or lifestyle issues.

SCA is NOT a heart attack. A heart attack may cause SCA, but they are not the same. A heart attack is caused by a blockage that stops the flow of blood to the heart. SCA is a malfunction in the heart's electrical system, causing the heart to suddenly stop beating.

PART II - HOW COMMON IS SUDDEN CARDIAC ARREST IN THE UNITED STATES?

SCA is the #1 cause of death for adults in this country. There are about 300,000 cardiac arrests outside hospitals each year. It is a leading cause of death for student athletes.

According to an April 2014 study for PubMed the incidence was

- 0.63 per 100,000 in all students (6 in one million)
- 1.14 per 100,000 athletes (10 in one million)
- 0.31 per student non-athletes (3 in one million)
- The relative risk of SCA in student athlete's vs non-athletes was 0.65
- There is a significantly higher risk of SCA for boys than girls

Leading causes of sudden death among high school and college athletes, according to the National Collegiate Athletic Association (NCAA) (on CBS News, June 28, 2012) * are heat stroke, heart disease and traits associated with sickle cell anemia. Prevention of sudden death, the same study concludes, is associated with more advanced cardiac screening with attention to medical histories and birth records, improved emergency procedures, and good coaching and conditioning practices. SCA can be prevented if the underlying causes can be diagnosed and treated.

PART III - WHAT ARE THE WARNING SIGNS AND SYMPTOMS?

Although SCA happens unexpectedly, some people may have signs or symptoms, such as: fainting or seizures during exercise; unexplained shortness of breath; dizziness; extreme fatigue; chest pains; or racing heart.

These symptoms can be unclear in athletes, since people often confuse these warning signs with physical exhaustion.

Sudden cardiac arrest is a medical emergency. If not treated immediately, it causes sudden cardiac death. With fast, appropriate medical care, survival is possible. Administering

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cardiopulmonary resuscitation (CPR) — or even just compressions to the chest — can improve the chances of survival until emergency personnel arrive. (<http://www.mayoclinic.org/diseases-conditions/sudden-cardiac-arrest/basics/>)

WHAT ARE THE RISKS OF PRACTICING OR PLAYING AFTER EXPERIENCING THESE SYMPTOMS?

There are risks associated with continuing to practice or play after experiencing these symptoms. When the heart stops, so does the blood that flows to the brain and other vital organs. Death or permanent brain damage can occur in just a few minutes. Most people who experience SCA die from it.

REMOVAL FROM PLAY

Any student-athlete who shows signs or symptoms of SCA must be removed from athletic activity and referred to a licensed health care professional trained specifically in the treatment of cardiac care. The symptoms can happen before, during or after activity.

RETURN TO PLAY

Before returning to play, the athlete must be evaluated. Clearance to return to play must be in writing. The evaluation must be performed and written clearance be provided by a licensed medical provider.

To summarize:

- SCA is, by definition, sudden and unexpected.
- SCA can happen in individuals who appear healthy and have no known heart disease.
- Most people who have SCA die from it, usually within minutes.
- Rapid treatment of SCA with a defibrillator can be lifesaving.
- Training in recognition of signs of cardiac arrest and SCA, and the availability of AEDs and personnel who possess the skills to use one, may save the life of someone who has had an SCA.

(National Heart, Lung, and Blood Institute)

Sources: Simons Fund - <http://www.simonsfund.org/>

Pennsylvania Department of Health –

<http://www.simonsfund.org/wp-content/uploads/2012/06/Parent-Handout-SCA.pdf>

The State Board of Education shall require all local and regional school districts to collect and report all occurrences of concussions to the board. Each report shall contain, if known, (1) the nature and extent of the concussion, and (2) the circumstances in which the student sustained the concussion (Public Act No. 14-66: An Act Concerning Youth Athletics and Concussions).