Health and Safety Best Practices and Resources

A. Fitness of Grounds

The Recreation & Parks Department maintains numerous outdoor multipurpose rectangular and diamond ball fields and parks which are used for Department-run programs and activities, as well as for private reservations.

The Recreation Department staff is responsible for assuring that all fields and parks are ready for use for scheduled activities. It shall be the responsibility party who will make the final decision on whether a field may be used for the planned activity. Program/activity/reservation cancellation will be considered when weather conditions may make playing conditions unsafe, impractical, uncomfortable, and/or fields vulnerable to excessive damage.

On days where rain or other inclement weather has been heavy the night before, the morning of, or the afternoon of, the responsibility party staff should be at the field site no later than 2 ½ hours prior to scheduled activity times to meet with representative from the maintenance section and assess field conditions.

The responsibility party may ask for the personal assessment and opinion of the maintenance staff on site, and will then decide whether the activity will be held or canceled. The Recreation Department staff will be responsible for the final determination.

Depending upon the number of fields needed, a minimum of one to two hours lead time is necessary for field preparation before play can begin. The responsibility party shall be responsible to keep all activity participants informed of play/use status. The responsibility party has the responsibility of contacting all appropriate participants and taking responsibility for the call of cancellation.

The responsibility party has the authority to change, modify, postpone, and/or cancel any reservation for any reason. This shall usually be considered when weather conditions may make playing conditions unsafe, impractical, uncomfortable, and/or fields vulnerable to excessive damage.

For reservations holding a substantial economic or tourist impact, the responsibility party staff shall have the final authority to grant and/or deny reservation field use. These events shall be identified in advance to make the necessary arrangements to cancel or continue on.

B. Inclement Weather

The decision regarding participation during inclement weather should be based solely on the welfare and safety of the participants. Whenever there is a risk of injury to participants, the activity must be canceled and rescheduled. The loss of a game or practice time must never influence one's decision to cancel or reschedule an event.

Unnecessary damage and abuse to playing fields must also be considered in the decision to conduct an event. When field conditions are wet and soft, damage to the turf is more prevalent and extensive. Activities must be canceled and rescheduled.

C. Thunderstorms and Lightning

Outdoor Activities - Whenever a thunderstorm is approaching or sighted, all field activities should be postponed until the storm has cleared. If it becomes apparent that the storm will not abate, the activity should be canceled.

D. Lightning Safety Rules

"When a thunderstorm threatens, get inside a home or a large building. Do not use the telephone except for emergencies.

If you are caught outside, do not stand underneath a tall isolated tree or a telephone pole. Avoid projecting above the surrounding landscape. For example, don't stand on a hilltop. In a forest, seek shelter in a low area under a thick growth of small trees. In open areas, go to a low place, such as a ravine or valley.

Get off or away from open water, tractors, and other metal farm equipment or small metal vehicles, such as motorcycles, bicycles, golf carts, etc. Put down golf clubs and take off golf shoes. Stay away from wire fences, clotheslines, metal pipes, and rails. If you are in a group of people spread out, keeping others several yards apart.

Remember -- lightning may strike some miles from the parent cloud. Precautions should be taken even though the thunderstorm is not directly overhead. If you are caught on a level field far from shelter and if you feel your hair stands on end, lightning may be about to strike you. Drop to your knees and bend forward, putting your hands on your knees. Do not lie flat on the ground.

Lightning Detection Devices

A **lightning detector** is a device that detects lightning produced by thunderstorms. There are three primary types of detectors: *ground-based* systems using multiple antennas, *mobile systems* using a direction and a sense antenna in the same location (often aboard an aircraft), and *space-based systems*.

The device was invented in 1894 by Alexander Stepanovich Popov. It also was the first radio receiver in the world.

Ground-based and mobile detectors calculate the direction and severity of lightning from the current location using radio direction-finding techniques together with an analysis of the characteristic frequencies emitted by lightning. Ground-based systems use triangulation from multiple locations to determine distance, while mobile systems estimate distance using signal frequency and attenuation. Space-based lightning detectors, on artificial satellites, can locate range, bearing and intensities by direct observation.

Ground-based lightning detector networks are used by meteorological services like the National Weather Service in United States and the Meteorological Service of Canada, and by other organizations like electrical utilities and forest fire prevention services.

E. National Emergency Weather Testing System

The **Emergency Alert System (EAS)** is a national warning system in the United States put into place on January 1, 1997, when it superseded the Emergency Broadcast System (EBS), which itself had superseded the CONELRAD System. In addition to alerting the designed to enable the President of the United States to speak to the United States within 10 minutes, but the nationwide federal EAS has never been activated. A national EAS test is planned for November 9, 2011. The EAS regulations and standards are governed

by the Public Safety and Homeland Security Bureau of the FCC. Each state and several territories have their own EAS plan. EAS has become part of IPAWS - the Integrated Public Alert and Warning System, a program of Federal Emergency Management Agency (FEMA). EAS is jointly coordinated by FEMA, the Federal Communications Commission (FCC), and the National Weather Service (NOAA/NWS).

The EAS is used on AM, FM and Land Mobile Radio Service, as well as VHF, UHF and cable television including low-power stations. Digital television and cable providers, along with Sirius XM satellite radio, IBOC, DAB and digital radio broadcasters have been required to participate in the EAS since December 31, 2006[] DirecTV, Dish Network and all other DBS providers have been required to participate since May 31, 2007.

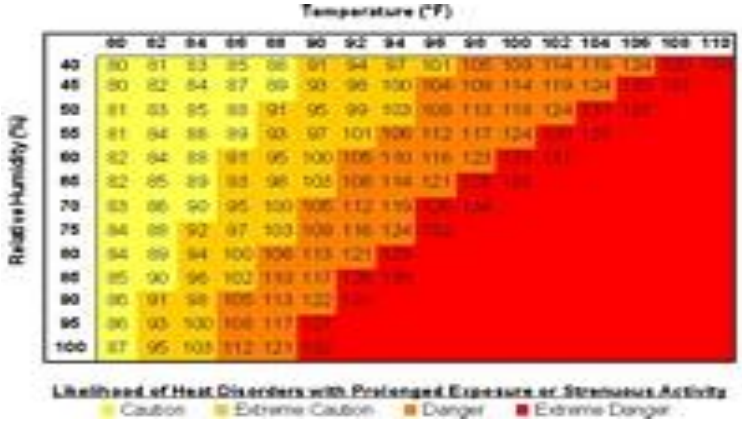
F. Heat Advisory Information

Each National Weather Service (NWS) Weather Forecast Office (WFO) can issue the following heat-related products as conditions warrant:

Excessive Heat Outlook: when the potential exists for an excessive heat event in the next 3 to 7 days. An outlook is used to indicate that a heat event may develop. It is intended to provide information to those who need considerable lead time to prepare for the event, such as public utilities, emergency management and public health officials.

Excessive Heat Watch: when conditions are favorable for an excessive heat event in the next 12 to 48 hours. A watch is used when the risk of a heat wave has increased, but its occurrence and timing is still uncertain. It is intended to provide enough lead time so those who need to set their plans in motion can do so, such as established individual city excessive heat event mitigation plans.

Excessive Heat Warning/Advisory: when an excessive heat event is expected in the next 36 hours. These products are issued when an excessive heat event is occurring, is imminent, or has a very high probability of occurrence. The warning is used for conditions posing a threat to life or property. An advisory is for less serious conditions that cause significant discomfort or inconvenience and, if caution is not taken, could lead to a threat to life and/or property.



Heat Index:
The heat index is the "feels like", or apparent, temperature. As relative humidity increases, the air seems warmer than it actually is because the body is less able to cool itself via evaporation of perspiration.

As the heat index rises, so do health risks. When the heat index is 90°-105°F, heat exhaustion is possible. When it is above 105°F, it is probable. Heatstroke is possible when the heat index is above 105°F, and very likely when it is 130°F and above. Physical activity and prolonged exposure to the heat increase the risks.

Heat Measuring Device

The invention is to provide a heat indicator measuring device that is able to appropriately prevent a heat disorder. The heat indicator measuring device includes: a temperature measuring unit that measures a temperature, a humidity measuring unit that measures humidity; and a heat index calculation unit that calculates a heat index from the measured temperature and humidity.

Digital Heat Index Monitor & Psychrometer with Barometer

Preventing Heat-Related Illness
Elderly persons, small children, chronic invalids, those on certain medications or drugs (especially tranquilizers and anticholinergics), and persons with weight and alcohol problems are particularly susceptible to heat reactions, especially during heat waves in areas where a moderate climate usually prevails.

Heat Wave Safety Tips

Slow down. Strenuous activities should be reduced, eliminated, or rescheduled to the coolest time of the day. Individuals at risk should stay in the coolest available place, not necessarily indoors.

- Dress for summer. Lightweight light-colored clothing reflects heat and sunlight, and helps your body maintain normal temperatures.
- Put less fuel on your inner fires. Foods (like proteins) that increase metabolic heat production also increase water loss.
- Drink plenty of water or other non-alcohol fluids. Your body needs water to keep cool. Drink plenty of fluids even if you don't feel thirsty. Persons who (1) have

epilepsy or heart, kidney, or liver disease, (2) are on fluid restrictive diets or (3) have a problem with fluid retention should consult a physician before increasing their consumption of fluids.

- Do not drink alcoholic beverages.
- Do not take salt tablets unless specified by a physician.
- Spend more time in air-conditioned places. Air conditioning in homes and other buildings markedly reduces danger from the heat. If you cannot afford an air conditioner, spending some time each day (during hot weather) in an air conditioned environment affords some protection.
- Don't get too much sun. Sunburn makes the job of heat dissipation that much more difficult
- Never leave persons, especially children, and pets in a closed, parked vehicle.

Know These Heat Disorder Symptoms

Sunburn: Redness and pain. In severe cases swelling of skin, blisters, fever, headaches. First Aid: Ointments for mild cases if blisters appear and do not break. If breaking occurs, apply dry sterile dressing. Serious, extensive cases should be seen by physician.

Heat Cramps: Painful spasms usually in muscles of legs and abdomen possible. Heavy sweating. First Aid: Firm pressure on cramping muscles, or gentle massage to relieve spasm. Give sips of water. If nausea occurs, discontinue use.

Heat Exhaustion: Heavy sweating, weakness, skin cold, pale and clammy. Pulse thready. Normal temperature possible. Fainting and vomiting. First Aid: Get victim out of sun. Lay down and loosen clothing. Apply cool, wet cloths. Fan or move victim to air conditioned room. Sips of water. If nausea occurs, discontinue use. If vomiting continues, seek immediate medical attention.

Heat Stroke (or sunstroke): High body temperature (106° F or higher). Hot dry skin. Rapid and strong pulse. Possible unconsciousness. First Aid: HEAT STROKE IS A SEVERE MEDICAL EMERGENCY. SUMMON EMERGENCY MEDICAL ASSISTANCE OR GET THE VICTIM TO A HOSPITAL IMMEDIATELY. DELAY CAN BE FATAL. Move the victim to a cooler environment Reduce body temperature with cold bath or sponging. Use extreme caution. Remove clothing, use fans and air conditioners. If temperature rises again, repeat process. Do not give fluids. Persons on salt restrictive diets should consult a physician before increasing their salt intake.

G. Accident/Injury Prevention

When approaching an injured person, be sure to keep the following sequences in mind. Look at their lip color, feel the chest or put your cheek next to their nose to see if they are breathing. If they are not breathing and there is no palpable pulse in their neck or wrist, you must immediately initiate Cardiopulmonary Resuscitation (CPR) and have someone

call for immediate medical assistance. This is why it is strongly recommended that anyone working with participants, especially children in sports is CPR certified. If the injury sustained is to the head or neck, the athlete must be calmed and restrained in the position found while emergency medical assistance is responding.

Treating Common Injuries – Remember the acronym (P.R.I.C.E.) for treating a common sports injury…

P – Protection – the injured area must be wrapped, splinted and protected.
R –Rest – the injured area must be immobilized and rested.
I – Ice – the use of ice has two basic purposes. The cooling effect is anesthetic and provides some relief from discomfort. It also provides a constriction of the blood vessels and reduces swelling to the injured area. Ice should be applied for 20 to 30 minutes and then removed for 1 – 2 hours before it is reapplied.
C – Compression – Compression should be applied to the area that's injured to minimize the swelling and to provide comfort along with rest and immobilization.
E – Elevation – The injured area should be elevated higher than the heart level to minimize the addition of swelling to that area.

Dealing with Injured Player – Assessing sports injuries is an integral role of coaching sports. Coaches must be prepared for any type of injury, including when a person goes down and may lose consciousness. The acronym (C.O.A.C.H.) is a handy reminder of how to respond.

C – Are they conscious?
O – Are the oxygenating (breathing)?
A – Ask where does it hurt.
C – Control the area that is painful
H – Do they need a hospital? Make a decision if you need to call for immediate medical assistance and have the person taken to the hospital

Injury Terms

First Degree Injury – stretching in a ligament or muscle tightness – able to move muscle with some discomfort, minimal swelling.
Second Degree Injury – more extensive tearing of fibers – pressure or weigh increases pain, sudden twinges during movement, may notice swelling.
Third Degree Injury – over 90% rupture of muscle, tendon or ligament – movement affected, noticeable swelling, usually bruising.

Some Symptoms of Common Injuries

Strains/Sprains – localize pain, limited range of motion, swelling and possible skin discoloration. *What to do:* carefully compress ice to the injured area and elevate it above the level of the heart to help reduce swelling and provide an anesthetic effect.

Dislocation/Fractures – pain, deformity and loss of function. *What to do:* call for emergency medical assistance to transport the athlete. DO NOT MOVE THE ATHLETE.

Do You Have A First Aid Kit – And Is It Properly Stocked?

A properly stocked first aid kit is vital for every coach to have, and here's what it should contain:

- Non-sterile gloves – keep several pairs in the kit in the event that you're dealing with blood. This also protects the athlete from possible infection from your unwashed hands.
- Small bottle of water to clean a cut or abrasion.
- Band aids/gauze pads – to assist in stopping any bleeding, to clean the area and to protect the area.
- Ace bandages – used to hold ice in place over the injured area and to provide compression to aid reducing swelling.
- Flexible splint – used to help control injured areas like a finger or wrist.
- Athletic tape – used to hold a flexible splint or aces bandages in place.
- Sling – immobilizes injuries to the shoulder and arm.
- CPR mouth protector
- Scissors
- Small bottle of water and eye cup – to safely and effectively remove debris from a person's eye.
- Ice or cold packs – used to reduce swelling and pain.

Other Helpful Items:

- Cell phones, scissors, tweezers, nail clippers, pen flashlight

H. Concussion Awareness and Prevention

What is a Concussion?

A concussion is a brain injury. Concussions are caused by a bump or blow to the head. Even a "ding," "getting your bell rung or what seems to be a mild bump or blow to the head can be serious.

You can't see a concussion. Signs and symptoms of concussion can show up right after the injury or may not appear or be noticed until days or weeks after the injury. If your child reports any symptoms of concussion, or if you notice the symptoms yourself, seek medical attention right away.

What are the Signs and Symptoms of a Concussion?

Signs Observed by Parents or Guardians

If your child has experienced a bump or blow to the head during a game or practice, look for any of the following signs and symptoms of a concussion:

- Appears dazed or stunned
- Is confused about assignment or position

- Forgets an instruction
- Is unsure of game, score, or opponent
- Moves clumsily
- Answers questions slowly
- Loses consciousness (even briefly)
- Shows behavior or personality changes
- Can't recall events prior to hit or fall
- Can't recall events after hit or fall

Symptoms Reported by Athlete

- Headache or "pressure" in head
- Nausea or vomiting
- Balance problems or dizziness
- Double or blurry vision
- Sensitivity to light
- Sensitivity to noise
- Feeling sluggish, hazy, foggy, or groggy
- Concentration or memory problems
- Confusion
- Does not "feel right"

How Can You Help An Athlete Prevent A Concussion?

Every sport is different, but there are steps an athlete can take to protect themselves from concussion.

- Ensure that they follow their coach's rules for safety and the rules of the sport.
- Encourage them to practice good sportsmanship at all times.
- Make sure they wear the right protective equipment for their activity (such as helmets, padding, shin guards, and eye and mouth guards). Protective equipment should fit properly, be well maintained, and be worn consistently and correctly. Learn the signs and symptoms of a concussion.

What Should You Do If You Think An Athlete Has A Concussion?

- **Seek medical attention right away.** A health care professional will be able to decide how serious the concussion is and when it is safe for an athlete to return to sports.

- **Keep an athlete out of play.** Concussions take time to heal. Don't let an athlete return to play until a health care professional says its okay. Athletes who return to play too soon-while the brain is still healing-risk a greater chance of having a second concussion. Second or later concussions can be very serious. They can cause permanent brain damage, affecting your child for a lifetime.

- **Tell an athlete's coach about any recent concussion.** Coaches should know if an athlete had a recent concussion in ANY sport. An athlete's coach may not

know about a concussion an athlete received in another sport or activity unless you tell the coach.

I. State Laws on Concussions

A. State of Virginia Law

CHAPTER 483

An Act to amend the Code of Virginia by adding a section numbered 22.1-271.5, relating to policies for student-athletes with concussions.

[S 652]

Approved April 11, 2010

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding a section numbered 22.1-271.5 as follows:

§ 22.1-271.5. Policies on concussions in student-athletes.

A. The Board of Education shall develop and distribute to each local school division guidelines on policies to inform and educate coaches, student-athletes, and their parents or guardians of the nature and risk of concussions, criteria for removal from and return to play, and risks of not reporting the injury and continuing to play.

B. Each local school division shall develop policies and procedures regarding the identification and handling of suspected concussions in student-athletes. Such policies shall require:

1. In order to participate in any extracurricular physical activity, each student-athlete and the student-athlete's parent or guardian shall review, on an annual basis, information on concussions provided by the local school division. After having reviewed materials describing the short- and long-term health effects of concussions, each student-athlete and the student-athlete's parent or guardian shall sign a statement acknowledging receipt of such information, in a manner approved by the Board of Education; and

2. A student-athlete suspected by that student-athlete's coach, athletic trainer, or team physician of sustaining a concussion or brain injury in a practice or game shall be removed from the activity at that time. A student-athlete who has been removed from play, evaluated, and suspected to have a concussion or brain injury shall not return to play that

same day nor until (i) evaluated by an appropriate licensed health care provider as determined by the Board of Education and (ii) in receipt of written clearance to return to play from such licensed health care provider.

The licensed health care provider evaluating student-athletes suspected of having a concussion or brain injury may be a volunteer.

C. In addition, local school divisions may provide the guidelines to organizations sponsoring athletic activity for student-athletes on school property. Local school divisions shall not be required to enforce compliance with such policies.

2. That the Board of Education, in developing the policies pursuant to subsection A of §22.1-271.5, shall work with the Virginia High School League, the Department of Health, the Virginia Athletic Trainers Association, representatives of the Children's Hospital of the King's Daughters and the Children's National Medical Center, the Brain Injury Association of Virginia, the American Academy of Pediatrics, the Virginia College of Emergency Physicians and other interested stakeholders.

3. That the policies of the Board of Education developed pursuant to subsection A of §22.1-271.5 shall become effective on July 1, 2011.

B. State of Maryland Law

SENATE BILL 771

F1

1lr1815

By: Senators Conway, Colburn, Currie, Ferguson, Forehand, Frosh, Kelley, Klausmeier, Madaleno, Manno, Mathias, McFadden, Middleton, Montgomery, Pinsky, Pugh, Ramirez, Raskin, Young, and Zirkin

Introduced and read first time: February 4, 2011

Assigned to: Education, Health, and Environmental Affairs

A BILL ENTITLED

AN ACT concerning 1

Education – Student–Athletes – Concussions 2

FOR the purpose of requiring the State Department of Education, in collaboration with certain organizations and individuals, to develop certain policies and implement a certain program; requiring a certain program to include a certain verification process; requiring county boards of education to provide a certain information sheet to certain individuals; requiring certain individuals to sign certain statements; requiring the Department to create a certain information sheet and acknowledgement statement; requiring the removal from play of certain student–athletes; prohibiting the return to play of certain student–athletes until certain student–athletes receive certain evaluation and clearance; requiring youth sports programs to provide certain information to county boards under certain circumstances; defining certain terms; and generally relating to the development of policies and implementation of a program to provide awareness on the nature and risk of concussions.

BY adding to

Article – Education

Section 7–432

Annotated Code of Maryland

(2008 Replacement Volume and 2010 Supplement)

Preamble

WHEREAS, A concussion is one of the most commonly reported injuries in children and adolescents who participate in sports and recreational activities; and

WHEREAS, The Centers for Disease Control and Prevention estimates that as many as 3,900,000 sports–related and recreation–related concussions occur in the United States each year; and

WHEREAS, A concussion is a type of brain injury that may range from mild to severe and can disrupt the way the brain normally works; and

WHEREAS, A concussion may occur in any organized or unorganized sport or recreational activity and may result from a fall or from players colliding with each other, the ground, or other obstacles; and

WHEREAS, A concussion may occur with or without loss of consciousness, but the vast majority of concussions occur without loss of consciousness; and

WHEREAS, Continuing to play with a concussion or symptoms of head injury 11 leaves a young athlete especially vulnerable to greater injury and even death; now, 12 therefore, 13

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF 14 MARYLAND, That the Laws of Maryland read as follows: 15

Article – Education 16

7–432. 17

(A) (1) IN THIS SECTION THE FOLLOWING WORDS HAVE THE 18 MEANINGS INDICATED. 19

(2) "CONCUSSION" MEANS A TRAUMATIC INJURY TO THE BRAIN 20 CAUSING AN IMMEDIATE AND, USUALLY, SHORT–LIVED CHANGE IN MENTAL 21 STATUS OR AN ALTERATION OF NORMAL CONSCIOUSNESS RESULTING FROM: 22

(I) A FALL; 23

(II) A VIOLENT BLOW TO THE HEAD OR BODY; OR 24

(III) THE SHAKING OR SPINNING OF THE HEAD OR BODY. 25

(3) "STUDENT–ATHLETE" MEANS AN INDIVIDUAL WHO IS 17 26 YEARS OLD OR YOUNGER OR WHO IS A PHYSICALLY OR MENTALLY DISABLED 27 INDIVIDUAL OF ANY AGE WHO PARTICIPATES IN AN ATHLETIC ACTIVITY IN 28 ASSOCIATION WITH: 29

(I) AN EDUCATIONAL INSTITUTION; OR 30

SENATE BILL 771 3

(II) A NONINTERSCHOLASTIC YOUTH SPORTS PROGRAM 1 CONDUCTED: 2

1. AT A PUBLIC SCHOOL FACILITY; OR 3

2. BY A RECREATIONAL ATHLETIC ORGANIZATION. 4

(4) "YOUTH SPORTS PROGRAM" MEANS A PROGRAM ORGANIZED 5 FOR RECREATIONAL ATHLETIC COMPETITION OR INSTRUCTION FOR NTS WHO ARE: 7

(I) UNDER THE AGE OF 18 YEARS; OR 8

(II) PHYSICALLY OR MENTALLY DISABLED REGARDLESS OF 9 AGE. 10

(B) (1) THE DEPARTMENT, IN COLLABORATION WITH THE 11 DEPARTMENT OF HEALTH AND MENTAL HYGIENE, EACH COUNTY BOARD, THE 12 MARYLAND PUBLIC SECONDARY SCHOOLS ATHLETIC ASSOCIATION, THE 13 MARYLAND ATHLETIC TRAINERS ASSOCIATION, THE BRAIN INJURY 14 ASSOCIATION OF MARYLAND, AND REPRESENTATIVES OF LICENSED HEALTH 15 CARE PROVIDERS WHO TREAT CONCUSSIONS, SHALL DEVELOP POLICIES AND 16 IMPLEMENT A PROGRAM TO PROVIDE AWARENESS TO COACHES, SCHOOL 17 PERSONNEL, STUDENT–ATHLETES, AND THE PARENTS OR GUARDIANS OF 18 STUDENT–ATHLETES, ON: 19

(I) THE NATURE AND RISK OF A CONCUSSION AND HEAD 20 INJURY; 21

(II) THE CRITERIA FOR REMOVAL FROM AND RETURN TO 22 PLAY; 23

(III) THE RISKS OF NOT REPORTING INJURY AND 24 CONTINUING TO PLAY; AND 25

(IV) THE APPROPRIATE ACADEMIC ACCOMMODATIONS FOR 26 STUDENT–ATHLETES WHO ARE SUSPECTED OF SUSTAINING A CONCUSSION OR 27 OTHER HEAD INJURY. 28

(2) THE PROGRAM SHALL INCLUDE A PROCESS TO VERIFY THAT A 29 COACH HAS RECEIVED INFORMATION ON THE PROGRAM DEVELOPED UNDER 30 PARAGRAPH (1) OF THIS SUBSECTION. 31

(3) (I) BEFORE A STUDENT–ATHLETE MAY PARTICIPATE IN AN 1 ATHLETIC ACTIVITY, THE COUNTY BOARD SHALL PROVIDE A CONCUSSION AND 2 HEAD INJURY INFORMATION SHEET TO THE STUDENT–ATHLETE AND A PARENT 3 OR GUARDIAN OF THE STUDENT–ATHLETE. 4

(II) THE STUDENT–ATHLETE AND THE PARENT OR 5 GUARDIAN OF THE STUDENT–ATHLETE SHALL SIGN A STATEMENT 6 ACKNOWLEDGING RECEIPT OF THE INFORMATION SHEET. 7

(III) THE DEPARTMENT SHALL CREATE THE INFORMATION 8 SHEET AND ACKNOWLEDGEMENT STATEMENT REQUIRED UNDER THIS 9 PARAGRAPH. 10

(4) THE DEPARTMENT MAY USE MATERIALS AVAILABLE FROM 11 THE CENTERS FOR DISEASE CONTROL AND PREVENTION, THE BRAIN INJURY 12 ASSOCIATION OF MARYLAND, OR ANY OTHER APPROPRIATE SOURCE TO 13 FULFILL THE REQUIREMENTS OF THIS SUBSECTION. 14

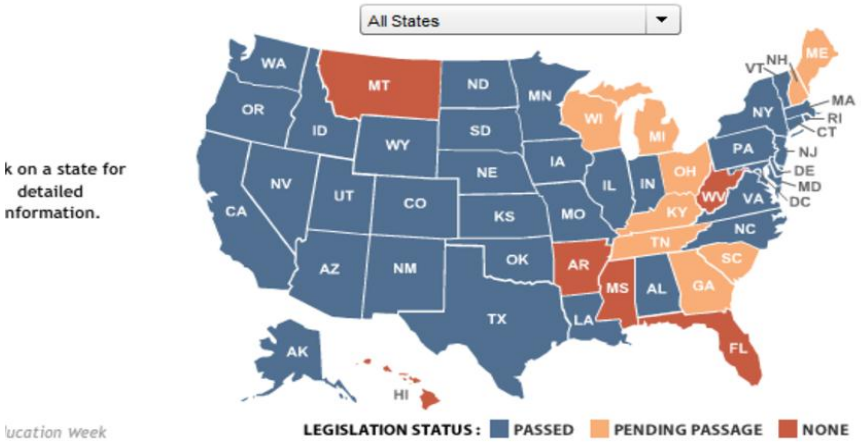
(C) (1) A STUDENT–ATHLETE WHO IS SUSPECTED OF SUSTAINING A 15 CONCUSSION OR ANY OTHER HEAD INJURY IN A PRACTICE OR GAME SHALL BE 16 REMOVED FROM PLAY AT THAT TIME. 17

(2) A STUDENT–ATHLETE WHO HAS BEEN REMOVED FROM PLAY 18 MAY NOT RETURN TO PLAY UNTIL THE STUDENT–ATHLETE HAS OBTAINED 19 WRITTEN CLEARANCE BY A LICENSED HEALTH CARE PROVIDER TRAINED **IN THE 20 EVALUATION AND MANAGEMENT OF CONCUSSIONS AND HEAD INJURY. 21**

(D) BEFORE THE FIRST USE OF A PUBLIC SCHOOL FACILITY, A YOUTH 22 SPORTS PROGRAM SHALL PROVIDE TO THE COUNTY BOARD A STATEMENT OF 23 COMPLIANCE WITH THE REQUIREMENTS FOR THE MANAGEMENT OF A 24 CONCUSSION OR OTHER HEAD INJURY OF A STUDENT–ATHLETE UNDER 25 SUBSECTION (C) OF THIS SECTION. 26

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect 27 July 1, 2011.

J. What Other States Have Laws on Concussions?



K. Equipment Safety

Headgear and Faceguards

Equipment safety should be the main priority of all athletes in all sports. The use of faceguards and safety balls in sports like baseball, softball, football, lacrosse, ice hockey, cycling and amateur boxing is aimed as a preventative measure for the protection of the athletes from serious head and eye injuries. In sports like tackle football, girl's fastpitch softball, ice hockey, boy's lacrosse a head gear with a face mask is required. At the present time, sports like baseball, girl's lacrosse, field hockey, rugby and cycling are not required to wear a face guard. In some localities and national organizations (National Federation of High Schools, Amateur Softball Association, USSSA Softball and NSA Softball Association) however, faceguards for sports like baseball and fastpitch softball require face guards on their helmets.

Faceguards and safety balls can dramatically reduce the risk of injury in baseball or softball, however it they cannot prevent all injuries. It is estimated that over 90% of all eye injuries are prevented with faceguards.

Safety Balls

Safety (reduced-impact) balls are recommended to be used in the lower youth divisions of sports such as baseball or softball. Studies have found that the use of safety balls reduce the risk of ball related injuries as much as 23%. The use of safety balls cannot prevent all injuries.

Eye Protection

Sports eye injuries can be serious, but preventable. Eye prevention that bears the seal of sanctioned organizations should be recommended for high risk sports (i.e. baseball, softball, football). It is recommended that players who wear eyeglasses during play should wear sports goggles with polycarbonate lenses meeting ASTM standards.

Athletic Mouth Guards

Sports mouthguards (athletic mouthpieces, football protectors, "mouth guards") are plastic dental appliances which, when worn, can help to protect the hard and soft tissues of the mouth from damage caused by traumatic blows and collisions.

The value of an athletic mouthguard simply cannot be overstated. Sports mouthguards can help prevent tooth fracture, tooth dislocation, and bone (jaw) fracture. Sports guards can help to prevent bruising or laceration of the soft tissues of the mouth. Wearing a mouthguard may help to protect an athlete from concussions. Sports mouth protectors can provide a psychological benefit for an athlete.

It's been estimated that as many as one third of all injuries treated by dentists are sports related. It's also been estimated that during any single season an athlete participating in a contact sport runs about a 10% chance of experiencing some sort of or facial injury (injury of the tissues or structures in or around the mouth).

Athletes participating in contact sports (sports where player to player contact is a regular and expected part of the sporting event) should protect their mouth with a guard.

Football, boxing, ice hockey, lacrosse, field hockey, roller hockey, soccer, rugby, basketball, martial arts, water polo, and wrestling should all be considered sports where the use of a mouth protector is paramount.
Other sports, while not being true contact sports, can still provide ample potential for collisions with objects or other athletes. Participants in handball, racquetball, baseball, skateboarding, rollerblading, skiing, skydiving, squash, surfing, volleyball, gymnastics, acrobatics, tennis, and bicycling should all make a point of obtaining and wearing mouth protection.

L. Equipment Certification and Replacement

National Operating Committee on Standards for Athletic Equipment (NOCSAE), a nonprofit corporation formed in 1969 in response to a need for a performance test standard for football helmets. In 1973, the NOCSAE Football Helmet Standard was developed. The 1974 new helmet models were the first tested to this standard. The baseball batting helmet standard was published in 1981, and the 1983 helmet models were the first tested to this standard. The baseball standard has since been designated as the baseball/softball batting helmet standard. In 1986 a performance test standard was published for lacrosse helmets and face masks, and in 1987, a standard for football face masks was released. In addition to publishing standards for testing baseball, lacrosse and football helmets, NOCSAE continues to investigate other athletic equipment to determine the feasibility or necessity of establishing standards.

NOCSAE consists of a board of directors which is comprised of representatives from the American College Health Association, American Orthopedic Society for Sports Medicine, Athletic Equipment Managers' Association, National Association of Secondary School Principals, National Athletic Equipment Reconditioners' Association, National Athletic Trainers Association, and American College of Sports Medicine, Sporting Goods Manufacturers' Association, and the College Football Association.

There is nothing in the NOCSAE standard that requires any helmet to be recertified on any regular basis. NOCSAE does recommend that organizations adopt and follow a program of helmet inspection and reconditioning that meets their particular needs, based on age and size of players, severity of helmet usage, ages of helmets, among other factors. Some schools recondition and recertify their football, baseball and softball helmets every year, some every two years.

A manufacturer may premise warranty coverage upon regular reconditioning and recertification, but that requirement is not mandated by the NOCSAE standards. A manufacturer is also free to limit the number of times its helmet may be reconditioned, or it may establish a useful life beyond which it will not allow reconditioning.

Face masks are subjected to ball and stick penetration and deflection tests at 55 mph and at ambient temperature. Neither the ball, stick nor mask must touch the face. A stick impact test is also conducted at 40 mph after the helmet and face mask have been stored

for four hours at 120 degrees F. Recertification of masks is dependent upon inspection of all masks. Masks must not be distorted more than 1/8 inch from a standard form and attaching straps and hardware must be free of distortion, defect or deterioration upon disassembly. Manufacturers certify and reconditioners recertify that helmets meet the respective performance test standards. NOCSAE does not certify, recertify, approve or disapprove helmets or any other athletic equipment.

For specific rules and requirements regarding helmets used in football, baseball/softball and lacrosse, the respective rules-making groups of the sponsoring organization would be contacted, i.e., the NCAA, the National Federation of State High School Associations, etc. There may be some circumstances where the use of non-certified equipment constitutes the use of illegal equipment and could result in player disqualification.

Those helmets which meet the NOCSAE standard must bear the seal, "Meets NOCSAE standards" and the logo for that type of helmet. The seal and logo are permanently branded or stamped on the outside rear portion of the helmet.

M. Resources

A. National Federation of High Schools Association (www.nfhs.org) 317.972.6900
B. National Youth Sports Coaches Alliance (www.nays.org) 800.729.2057
C. USA Football (www.usafootball.com)
D. U.S. Department of Health and Human Services Centers For Disease Control And Prevention WWW.Cdc.gov/ConcussionInYouthSports and WWW.Cdc.gov/injury
E. National Operating Committee on Standards for Athletic Equipment (NOCSAE) (www.nocsae.org)
F. American Society of Testing and Measurement (www.astm.org)
G. American Academy of Ophthalmology – (www.aao.org)
H. United States Department of Commerce - **National Oceanic and Atmospheric Administration** (www.noaawatch.gov)
I. Amateur Softball Association – (www.asasoftball.com)
J. USSSA Softball Association – www.usssa.com)
K. NSA Softball Association - (www.playnsa.com)
L. National Little League – (www.littleleague.org)
M. Dixie Youth Baseball – (www.youth.dixie.org)
N. Sportsconcussions.org – (www.sportsconcussions.org)

(Approved) November 2, 2011