


# FAIRFAX COUNTY PUBLIC SCHOOLS

## PARENT/GUARDIAN AND STUDENT-ATHLETE ATHLETIC HEALTH EDUCATION PROGRAM

COMPLIES WITH CODE OF VIRGINIA AND VIRGINIA BOARD OF EDUCATION REQUIREMENTS RELATED TO CONCUSSION, SUDDEN CARDIAC ARREST, AND HEAT-RELATED ILLNESS EDUCATIONAL PROGRAMS



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## INTRODUCTION

Virginia's Student-Athlete Protection Act (Code of Virginia 22.1-271.5) requires completion of a concussion education program by parents/guardians and students before the student can participate in school-sponsored athletics

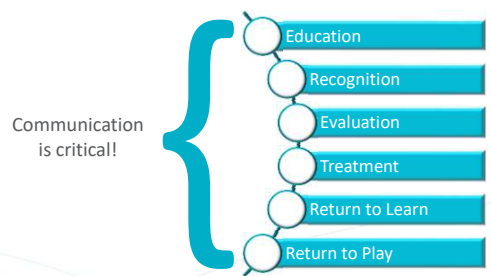
**Program overview**

- Concussion management
- Infectious disease prevention
- Sudden cardiac arrest
- Environmental conditions (lightning, heat and cold)
- Mental health (depression, suicide)

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## WHAT'S INVOLVED IN CONCUSSION MANAGEMENT

Communication is critical!



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## WHAT IS A CONCUSSION?

“Sport related concussion is a traumatic brain injury induced by biomechanical forces.” (Berlin 5th Consensus Statement on Concussion in Sport, 2016)

- May be caused by a direct blow to the head, face, neck or elsewhere on the body
- Concussion is not usually associated with structural damage to the brain; Routine imaging (CT scans, MRIs, x-rays) likely normal
- Typically features rapid onset of symptoms that may evolve over minutes, hours or days
- Concussion may or may not involve a loss of consciousness (LOC)
- Concussion results in a wide range of symptoms lasting a few minutes, days, weeks, months or longer in some cases

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## RECOGNIZING A CONCUSSION

- Early recognition of symptoms is essential to safe, effective concussion management
- If a concussion is suspected, the student should stop activity and report the injury to an athletic trainer or another adult immediately
- Symptoms may occur immediately following the trauma to the head/body, develop hours or even days later, and change over time
- Visits to the hospital are necessary when signs and symptoms worsen in the hours following the injury
  - A negative or “normal” CT scan or MRI does NOT mean you do not have a concussion

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## COMMON CONCUSSION SIGNS AND SYMPTOMS

<p><b>Physical</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Headache</li> <li><input type="checkbox"/> Nausea/vomiting</li> <li><input type="checkbox"/> Dizziness</li> <li><input type="checkbox"/> Balance problems</li> <li><input type="checkbox"/> Vision/hearing problems</li> <li><input type="checkbox"/> Fatigue</li> <li><input type="checkbox"/> Sensitivity to light/noise</li> </ul>	<p><b>Cognitive</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Confusion</li> <li><input type="checkbox"/> Feeling “foggy”</li> <li><input type="checkbox"/> Feeling slowed down</li> <li><input type="checkbox"/> Difficulty concentrating</li> <li><input type="checkbox"/> Difficulty with communication, reading/writing</li> <li><input type="checkbox"/> Difficulty with problem solving and planning</li> <li><input type="checkbox"/> Memory loss</li> </ul>
<p><b>Behavioral/Emotional</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> More emotional</li> <li><input type="checkbox"/> Irritability</li> <li><input type="checkbox"/> Depression/Anxiety</li> <li><input type="checkbox"/> Anger/easily frustrated</li> <li><input type="checkbox"/> Nervousness</li> <li><input type="checkbox"/> Apathetic</li> <li><input type="checkbox"/> Impulsivity</li> </ul>	<p><b>Sleep</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Drowsiness</li> <li><input type="checkbox"/> Sleeps too much</li> <li><input type="checkbox"/> Sleeping too little</li> <li><input type="checkbox"/> Trouble falling asleep</li> </ul>

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## WHEN TO RUSH TO THE HOSPITAL

These are signs of a **MEDICAL EMERGENCY!**

- Headaches that worsen
- Repeated vomiting
- Seizures
- Neck pain
- Very drowsy
- Significant irritability
- Unusual behavior changes
- Slurred speech
- Weakness/numbness in arms/legs

If symptoms get worse following the injury

**CALL 911 or GO TO THE HOSPITAL**

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## QUICK REVIEW

Trauma

Signs/Symptoms  
or "Feeling  
Different"

Remove from  
activity, Rest, and  
Report

- Suspect a concussion if a student:
  - BEHAVES DIFFERENTLY following trauma to the head or body
  - EXPERIENCES SYMPTOMS (headache, light sensitivity, etc.)
  - HAS TROUBLE CONCENTRATING OR SLEEPING
- Remove from activity and seek further evaluation and care from a licensed medical professional

**WHEN IN DOUBT, SIT IT OUT**

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## FOLLOWING A CONCUSSION....

Keep the student home from school if they experience

- Trouble sleeping
- Persistent headache
- Sensitivity to light/noise
- Feeling foggy
- Dizziness or lightheadedness
- More irritable than usual

- Do not use any medication unless directed by a medical professional

Please provide any documentation related to the student's concussion with the appropriate school staff member(s) and the MS Athletic Coordinator

- Notes, treatment recommendations, academic or athletic participation instructions

It is ok to send your child to school if he or she

- Slept well
- Wakes up headache free
- Wakes up feeling "normal"

- Your child may experience a return of symptoms during class
  - Please be prepared to pick your child up and take them home to rest

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## KEYS TO CONCUSSION TREATMENT

- Physical and Cognitive rest
  - Minimizing physical and mental activities early on helps promote brain recovery
  - Avoid further trauma/injury to the brain
  - Sleep is helpful- no need to awaken during the night
- Limit stress and anxiety
- Progressive return to academic and athletic activities
- Effective communication
  - Parents/guardians, medical professionals and school staff should share information on a regular basis
- Don't do anything that makes symptoms worse!

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## PARENT'S ROLE

- Recognize and report any signs and symptoms or changes in behavior to the student's medical provider
  - Parents are urged to support the recommended modifications for progressive return to academics and physical activity
- Continue to provide feedback, share observations with school staff (counselors, teachers, etc.)

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## STUDENT-ATHLETE'S ROLE

- Be aware of signs and symptoms
- Understand importance of recognition
  - Don't hide it, report it!
- Be AWARE of teammates on and off the field, specifically any behavior that is out of the ordinary for them
- REPORT problems
  - Friends don't let friends play with signs of a concussion

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## WHAT IS RETURN TO LEARN?

- Systematic/progressive reintroduction of cognitive and academic activities
- Usually includes series of distinct stages lasting days or weeks, occasionally longer and may include the following:
  - Rest at home, limited school attendance
  - Changes in the amount/type of schoolwork and tests
  - Increased levels of academic and instructional support

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## HOW DOES RETURN TO LEARN WORK?

- Collaborative effort involving the student, his or her parents/guardians, medical professionals and school staff
  - Effective communication is critical!
- As the student recovers, academic demands are increased in a gradual, progressive fashion
- Progression is determined by the resolution of symptoms
- Students are expected to be participating normally in the classroom before returning to sports

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## WHEN IS IT SAFE TO RETURN TO PLAY?

- Student no longer exhibits any signs or symptoms consistent with concussion
- Student has received written medical release from an appropriate licensed health care provider
  - Athletic trainer, physician (MD or DO), nurse practitioner, physician assistant or neuropsychologist
- Student successfully completes return to play progression
  - Period of supervised, gradually intensifying exercise
  - Process takes a MINIMUM of 5-7 days
    - Usually 24 hours between stages
    - Progression to next stage based on presence of symptoms

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## RETURN TO PHYSICAL ACTIVITY

Rehabilitation Stage	Functional Exercise	Objective
1. No activity	Complete physical and cognitive rest	Recovery
2. Light aerobic activity	Walking, swimming, stationary cycling. Mild intensity	Increase HR
3. Sport-specific activity	Running or skating drills. No head impact activities	Add movement
4. Non-contact training drills	Progression to more complex training drills	Exercise, coordination, cognitive load
5. Full contact practice	Following medical clearance. Normal training activities	Restore confidence, assessment of functional skills by coaching staff
6. Return to play	Normal game play	

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## LONG-TERM CONCUSSION CONCERNS

- The relationship between concussion and any possible long-term consequences remains unclear
- Areas of concern include:
  - Persistent concussion-related symptoms
  - Development of mental health conditions
  - Occurrence of chronic, concussion-related changes
- Many questions exist regarding which individuals may suffer long-term complications and under what circumstances

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## LONG-TERM CONCUSSION CONCERNS

- While there are still a lot of questions about concussions, medical experts agree on the following:
  - Early identification and proper management is critical to minimizing both short and long-term consequences
  - Returning to activity (physical and cognitive) too soon can negatively impact recovery
  - Physical activity and sport participation minimizes the risk of certain diseases and is essential to promoting a healthy lifestyle

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## SUMMARY

- Is the student ready to return to normal activities?
  - ✓ Teacher feedback
    - No need for classroom modifications
    - Participation is back to "normal"
      - What was the student like before?
      - What is the student like now?
  - ✓ Parent feedback
    - Is the parent ready for the student to return?
    - Is the student ready to return?
  - ✓ Medical professional feedback
    - Has student completed Return to Learn and Return to Play progressions

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## PREVENTING SPREAD OF INFECTIOUS DISEASE

- The nature of sports leads to an increased risk of communicable infections, particularly skin infection
- Skin infections include, but are not limited to, ringworm (fungal infection), staph, impetigo (bacterial infections), herpes (viral infections), MRSA and conjunctivitis (pink eye)
- Transmission of disease and skin infection can be minimized when athletes practice proper hygiene, including showering daily after practice

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## PREVENTING SPREAD OF INFECTIOUS DISEASE

- Carefully and thoroughly inspect your body for lesions or signs of skin infection regularly
- Lesions identified during self-inspections or observed on a teammate should be brought to the immediate attention of the coach
- Follow the direction of the medical provider regarding participation in practices and competition if diagnosed with a communicable infection

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## TIPS FOR PREVENTING THE SPREAD OF INFECTIOUS DISEASE

- Shower with soap and water immediately following practices or competitions
- Do not share clothes, towels, soap, razors, deodorant or other personal care items
- All clothes/towels worn or used during practice and competition should be washed daily
- Drink from team water bottles by squirting, not sucking or slurping

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## SUDDEN CARDIAC ARREST

- Sudden Cardiac Arrest (SCA) occurs when the heart stops beating
- Pre-participation screening should include any family history of sudden cardiac arrest as well as any personal episodes of exertional syncope (fainting), chest pain or shortness of breath
  - It is essential that the coach and Athletic Coordinator be aware of any athlete with a family history of SCA

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## SUDDEN CARDIAC ARREST

- Common signs and symptoms for SCA include:
  - Unexplained collapse/fainting
  - Unexplained shaking, convulsions, or tremors (seizure-like movements)
  - Unexplained shortness of breath
  - Feeling like the heart is racing or "beating out of the chest"
  - Chest pain
  - Unexplained dizziness
  - Extreme fatigue

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## SUDDEN CARDIAC ARREST

- Individuals experiencing any signs or symptoms indicating increased risk for SCA are encouraged to report these signs or symptoms to a trusted adult immediately
- A failure to do so may delay medical evaluation and medical intervention increasing the risk of sudden death or disability
- Student-athletes who continue to play while experiencing these signs or symptoms may experience SCA

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## SUDDEN CARDIAC ARREST

- A student removed from play after experiencing signs or symptoms of SCA shall not return to play that day nor until evaluated by and in possession of written clearance to return to play from an appropriate licensed health care provider
- Starting CPR and using an AED as soon as possible are the best treatments for SCA
  - AEDs are available in every FCPS middle school
  - Coaches have established Emergency Action Plans in case of emergency
  - FCPS has over 650 AEDs in schools and offices

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## ENVIRONMENTAL CONDITIONS: LIGHTNING

- The most effective way to prevent lightning injury is to remain or move indoors during lightning activity
- Each team has an established Emergency Action Plan identifying the safe shelter closest to outdoor athletic venues in case of lightning
- With few exceptions, the nearest safe shelter is the school building
- If the building is not accessible, a school bus or private vehicle is the next best option

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## ENVIRONMENTAL CONDITIONS: COLD

- Student-athletes should be properly dressed when participating outdoors during cold weather
- Proper attire includes:
  - Long sleeves and pants
  - Hats and gloves
  - Sweatshirts and jackets
- Students not properly dressed for the weather may not be allowed to participate that day

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## ENVIRONMENTAL CONDITIONS: HEAT-RELATED ILLNESS

- Heat cramps- cramping associated with dehydration and sodium/electrolyte loss during exercise in hot/humid environments
- Heat syncope (fainting)- temporary decrease in blood flow resulting in fainting; associated with dehydration
- Heat exhaustion- cardiovascular system is temporarily unable to meet the body's demand for oxygenated blood
- Heat stroke- a medical emergency occurring when the body is unable to adequately cool itself during exercise; characterized by elevated core body temperature

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## ENVIRONMENTAL CONDITIONS: HEAT-RELATED ILLNESS

- Risk factors for heat-related illness include:
  - Inadequate fluid intake before and during exercise leading to dehydration
  - Inadequate rest and recovery time
  - Inadequate acclimatization to exercise in hot/humid environments
  - Being overweight or obese
  - Wearing dark colored or heavy-weight clothing
  - Low overall fitness level

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## ENVIRONMENTAL CONDITIONS: HEAT-RELATED ILLNESS

- Signs and symptoms of heat-related illness include:
  - Irrational behavior, irritability, or emotional instability
  - Altered consciousness
  - Excessive fatigue
  - Disorientation
  - Dizziness
  - Headache
  - Confusion
  - Nausea or vomiting
  - Diarrhea
  - Collapse
  - Staggering or sluggish feeling
- Individuals experiencing or reporting any of these signs or symptoms should be removed from activity immediately

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## ENVIRONMENTAL CONDITIONS: HEAT-RELATED ILLNESS

- Individuals who continue to exercise while experiencing any of these signs or symptoms are at risk of experiencing a medical emergency
- If heat exhaustion or heat stroke are suspected, immediately cool the individual through whole-body, cold-water immersion, cold water dousing (cold shower), and/or ice towels or ice bags placed over their body and rotated frequently
- A student-athlete suspected of experiencing heat stroke shall not return to play that day nor until evaluated by and in possession of written clearance to do so from an appropriate licensed health care provider

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## CAUSES OF ANXIETY AND DEPRESSION

- Some have atypical activity in areas of the brain that deal with fear and emotional regulation
- Females are generally more at risk for developing anxiety disorders
- Genetics and temperament play a role
- Environmental factors (stressful environment, witnessed traumatic event)
- Experiences play a part (observe others, overly protective/controlling adults, learning to avoid situations)
- Styles of thinking – negative, unrealistic

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## SIGNS OF ANXIETY

- Have headaches, stomachaches, other pain
- Be irritable or angry – may become aggressive or yell
- Trouble falling or staying asleep
- Cry easily
- Difficulty concentrating and remembering information
- Sweat a lot or have shortness of breath
- Tremble/shake
- Worry excessively
- Easily upset by mistakes
- Feel tired
- Avoidance/withdrawal

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## SIGNS OF DEPRESSION

- Poor performance in school
- Low self esteem or guilt
- Withdrawal from friends and activities
- Indecision, lack of concentration, forgetfulness
- Sadness and hopelessness
- Restlessness or agitation
- Lack of enthusiasm, energy, or motivation
- Changes in eating or sleeping patterns
- Anger or rage
- Substance abuse
- Difficulty dealing with criticism
- Problems with authority
- Feelings of being unable to reach goals
- Suicidal thoughts or actions

Every person has experienced some of these feelings; however, when many of these occur at once for a period of several weeks, it is time to seek professional help.

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## RISK FACTORS FOR SUICIDE

- Teens who attempt suicide often have long-standing problems and the attempt is triggered by a specific event that sends them "over the top."
  - No one factor or event causes suicide.
- However, there are several risk factors that have been identified, such as:
  - History of substance abuse
  - Conduct disorder
  - Depression
  - Access to firearms/weapons
  - Hopelessness
  - Impulsivity



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## CONTRIBUTING FACTORS

- Abuse or trauma exposure
- Academic difficulties or school failure
- Anniversary of the death of a loved one
- Breakup with a significant other
- Bullying
- Disappointment or rejection
- Extended separation from friends or family
- Family conflict/dysfunction
- Getting into legal trouble
- Knowing someone who died by suicide
- Loss or death of a loved one
- Serious illness or injury

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## WARNING SIGNS OF SUICIDE

- Making suicide threats
- Giving away valued possessions
- Overwhelming sense of guilt and/or shame
- Suddenly seeming "fine" when they have been feeling very depressed
- Being obsessed with death
- Severe drop in school performance
- Changed eating or sleeping patterns
- Creating poems, essays, or drawings that refer to death
- Making dramatic changes in personality or appearance
- Engaging in irrational, bizarre behavior

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## TIPS TO INCREASE MENTAL WELLNESS

- Exercise
- Eat a healthy diet
- Have a support network
- Get enough sleep
- Engage in relaxation activities
- Be well-prepared
- Set realistic, attainable goals
- Be optimistic – look at the bright side of things

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## BENEFITS OF REGULAR EXERCISE

- Research has proven many benefits from exercise in addition to overall fitness:
  - Increased alertness
  - Increased amount of "feel good" chemicals in brain
  - Improved mood
  - Improved self-confidence and esteem
  - Improved sense of independence and control
  - Improved social support from others
  - Decreased anxiety/depression
  - Decreased probability of developing mental health disorders

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## WHAT CAN FAMILY AND FRIENDS DO?

- Be available to listen and talk with your child
  - Validate their feelings and let them know you care, even if you do not agree or think that the situation is not a big deal.
- Know where your children are and with whom they are hanging out
- Praise them and recognize when they do a good job
- Know warning signs and remove weapons and pills from your home
- If you think your child might be anxious or depressed, ask them if they've thought about suicide

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## WHAT CAN FAMILY AND FRIENDS DO?

- Set clear and consistent boundaries
- Teach "life skills" (respect, responsibility, adaptive/coping skills)
- Seek professional help from a doctor, mental health professional or community mental health resources
  - People with clinical depression can be treated successfully with medication and/or talk therapy.
- Keep teachers, psychologists, doctors, and coaches informed, so we can work together to support your child

**NEED HELP? MENTAL HEALTH RESOURCES 24/7 EMERGENCY NUMBERS**

**In case of a life threatening emergency, call 911**

CrisisLink Regional Hotline: 703-527-4077  
 CrisisText: Text NEEDHELP to 85511  
 Dominion Hospital Emergency Room: 703-536-2000  
 Inova Emergency Services: 703-289-7560  
 Mobile Crisis Unit: 1-844-627-4747  
 National Suicide Prevention Lifeline: 1-800-273-TALK or 1-800-SUICIDE  
 Merrifield Center Emergency Services: 703-573-5679  
 TTY dial 711

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## WHAT CAN FAMILY AND FRIENDS DO?

- Provide caring and support
- Set and communicate high expectations, but avoid applying excessive pressure or stress on the student
- Provide opportunities for meaningful participation
  - Volunteer, mentor, extracurricular activities
- Increase pro-social bonding
- Build resilience



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## RESILIENCE

An ability to recover from or adjust easily to misfortune or change  
<emotional *resilience*>

[www.Merriam-Webster.com/dictionary/resilience](http://www.Merriam-Webster.com/dictionary/resilience), April 29, 2014

**A safety net**

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## BUILD YOUR RESILIENCE

Vanderbilt University Faculty and Staff <http://healthandwellness.vanderbilt.edu/qr/resilience-toolkit.php>

### Attitudes

- Be optimistic
- Build connections
- Welcome change
- Have a sense of humor
- Express gratitude
- Accept help

### Skills

- Problem solver
- Communicator
- Emotionally Intelligent
- Practice Mindfulness

### Lifestyle

- Stay active, eat well and get plenty of sleep

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## RESOURCES

- Additional information about the FCPS Middle School Athletics Program is available here: [FCPS MS Athletics](#)
- Additional information on concussions is available from:
  - American Academy of Family Physicians: <http://familydoctor.org/familydoctor/en/diseases-conditions/concussion.html>
  - Centers for Disease Control and Prevention: <http://www.cdc.gov/headsup/index.html>

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## FCPS ATHLETIC HEALTH EDUCATION PROGRAM

- Thank you for reviewing the FCPS Athletic Health Education Program for Parents and Student-Athletes
- If you have any questions, please contact the Athletic Coordinator at your student's middle school

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