



**safe sports school**  
NATIONAL ATHLETIC TRAINERS' ASSOCIATION

# FAIRFAX COUNTY PUBLIC SCHOOLS

PARENT/GUARDIAN AND STUDENT-ATHLETE  
SPORTS EDUCATION PROGRAM



# INTRODUCTION



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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

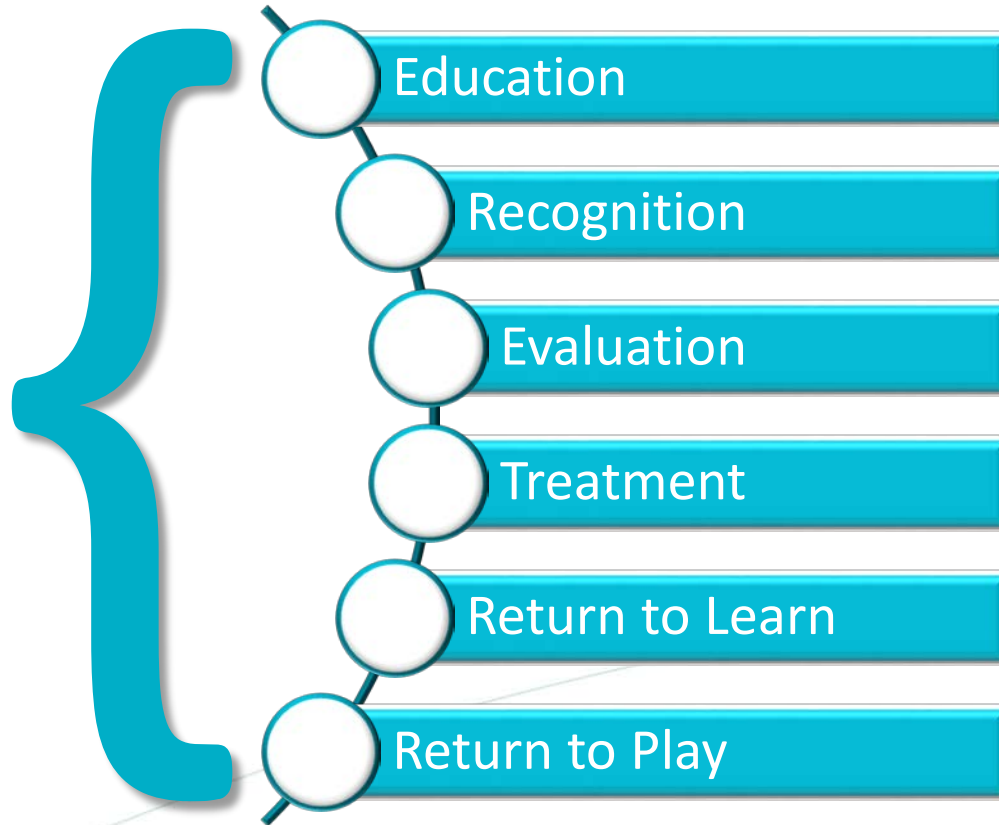
- Concussion management
- Infectious disease prevention
- Sudden cardiac arrest
- Environmental conditions (lightning, heat and cold)
- Mental health (depression, suicide)

# WHAT'S INVOLVED IN CONCUSSION MANAGEMENT



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Communication  
is critical!



# WHAT IS A CONCUSSION?



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“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

# RECOGNIZING A CONCUSSION



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- 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

# COMMON CONCUSSION SIGNS AND SYMPTOMS



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## Physical

- Headache
- Nausea/vomiting
- Dizziness
- Balance problems
- Vision/hearing problems
- Fatigue
- Sensitivity to light/noise

## Cognitive

- Confusion
- Feeling “foggy”
- Feeling slowed down
- Difficulty concentrating
- Difficulty with communication, reading/writing
- Difficulty with problem solving and planning
- Memory loss

## Behavioral/Emotional

- More emotional
- Irritability
- Depression/Anxiety
- Anger/easily frustrated
- Nervousness
- Apathetic
- Impulsivity

## Sleep

- Drowsiness
- Sleeps too much
- Sleeping too little
- Trouble falling asleep

# WHEN TO RUSH TO THE HOSPITAL



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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**

# QUICK REVIEW



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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 report the injury to the athletic trainer or another adult

**WHEN IN DOUBT, SIT IT OUT**



# WHEN A CONCUSSION IS SUSPECTED



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- The athletic trainers will evaluate the student
- Parents will be provided a copy of the FCPS Acute Concussion Evaluation (ACE) Care Plan
  - ACE Care Plan includes
    - Definition of concussion
    - Signs and symptoms of concussion
    - When to seek urgent care
    - Return to daily activity and participation information
  - Licensed athletic trainer contact information
- The athletic trainer will initiate communication with appropriate school staff members

# THE ROLE OF THE ATHLETIC TRAINER



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- ALL concussions require rest and evaluation by an appropriate licensed healthcare professional
- FCPS licensed athletic trainers are qualified healthcare professionals who can evaluate and create a treatment plan for student-athletes experiencing a concussion

# IF YOU SEE A PHYSICIAN OR CONCUSSION SPECIALIST



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- Notify the athletic trainers at your school before you go when possible
  - We are happy to share the results of our evaluations
- Report to the athletic trainers following your visit
- Share any documentation with the athletic trainer
  - Notes, treatment recommendations, academic or athletic participation instructions

# CONCUSSION ASSESSMENT OVERVIEW



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- There is no single “best” test to diagnose a concussion- evaluation is a complex process
- FCPS athletic trainers use a variety of tools to evaluate students from different perspectives, including:
  - Reaction time
  - Memory
  - Balance
  - Eye tracking
  - Self-reported symptoms

# COMPUTER-BASED NEUROCOGNITIVE ASSESSMENT



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- Neurocognitive assessment is used to examine memory and processing speed
- Neurocognitive assessment is one of several tools used by athletic trainers to evaluate students with a concussion
- Neurocognitive assessment does not diagnose a concussion by itself
- Post-injury neurocognitive assessments are administered as needed during student recovery
- Neurocognitive assessments require students to focus their attention, read instructions and complete various subtests with practice opportunities prior to each task.

# COMPUTER-BASED NEUROCOGNITIVE ASSESSMENT



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- Student-athletes may be asked to complete a baseline neurocognitive assessment early in their athletic season.
- While not a requirement to play sports, student-athletes are strongly encouraged to complete a baseline.
- Questions or concerns regarding neurocognitive assessment should be directed to the school's athletic trainers.

# FOLLOWING A CONCUSSION....



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## 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
- Contact the licensed athletic trainer for further information

## 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
- The student **MUST** report to the athletic trainers at the end of the school day for follow-up

# KEYS TO CONCUSSION TREATMENT



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- 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!



# PARENT'S ROLE



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- Recognize and report any signs and symptoms or changes in behavior to the school's licensed athletic trainer
  - The athletic trainer will communicate with teachers
  - 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 (athletic trainer, counselors, teachers, etc.)

# STUDENT-ATHLETE'S ROLE



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- 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

# WHAT IS RETURN TO LEARN?



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- 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 school work and tests
  - Increased levels of academic and instructional support

# HOW DOES RETURN TO LEARN WORK?



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- 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

# WHEN IS IT SAFE TO RETURN TO PLAY?



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- 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

# RETURN TO PHYSICAL ACTIVITY



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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	

# LONG-TERM CONCUSSION CONCERNS



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- 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

# LONG-TERM CONCUSSION CONCERNS



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- 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



# SUMMARY



- Regular evaluation is essential
  - Licensed athletic trainers will re-evaluate and provide recommendations on a regular basis
- 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

# PREVENTING SPREAD OF INFECTIOUS DISEASE



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- 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

# PREVENTING SPREAD OF INFECTIOUS DISEASE



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- 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 and the school's athletic trainer
- Follow the direction of the athletic trainer regarding participation in practices and competition if diagnosed with a communicable infection

# TIPS FOR PREVENTING THE SPREAD OF INFECTIOUS DISEASE



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- 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

# SUDDEN CARDIAC ARREST



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- 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 licensed athletic trainers be aware of any athlete with a family history of SCA

# SUDDEN CARDIAC ARREST



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- Starting CPR and using an AED as soon as possible are the best treatments for SCA
  - Athletic trainers have access to an AED and an established Emergency Action Plan in case of emergency
  - FCPS has over 600 AEDs in schools and offices



# ENVIRONMENTAL CONDITIONS



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- **Lightning**
  - The most effective way to prevent lightning injury is to remain or move indoors during lightning activity
  - Each school has an established Emergency Action Plan identifying the safe shelter closest to outdoor athletic venues in case of lightning
- **Heat**
  - Athletes should gradually adapt to the heat, especially those wearing protective equipment
  - Athletes should hydrate before, during and after activity

# ENVIRONMENTAL CONDITIONS



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- 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 participated that day



# CAUSES OF ANXIETY AND DEPRESSION



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- 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

# SIGNS OF ANXIETY



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

# SIGNS OF DEPRESSION



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

# RISK FACTORS FOR SUICIDE



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- 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



# CONTRIBUTING FACTORS



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- 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

# WARNING SIGNS OF SUICIDE



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- 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

# TIPS TO INCREASE MENTAL WELLNESS



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- 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

# BENEFITS OF REGULAR EXERCISE



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- 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



# WHAT CAN FAMILY AND FRIENDS DO?



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- 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

# WHAT CAN FAMILY AND FRIENDS DO?



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- 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**

# WHAT CAN FAMILY AND FRIENDS DO?



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- 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



# RESILIENCE



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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

# BUILD YOUR RESILIENCE

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



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## 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

# RESOURCES



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- Additional information about the FCPS Athletic Training Program and the topics covered in the presentation can be found online at [www.fcps.edu/sports](http://www.fcps.edu/sports)
- 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>

# FCPS SPORTS EDUCATION PROGRAM



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- Thank you for completing the online FCPS Sports Education Program for Parents and Student-Athletes
- If you have any questions, please contact the licensed athletic trainer at your school
- Please print the next slide, sign it (both student and parent/guardian) and submit to your school along with your physical

I verify that I have received, reviewed and understand the information contained in the FCPS Concussion Education Presentation



Student name (print) \_\_\_\_\_

School \_\_\_\_\_ Student ID# \_\_\_\_\_

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

Parent/Guardian  
Signature \_\_\_\_\_ Date \_\_\_\_\_

**Please return this page to the Activities Office along with your physical!**