

CONCUSSION

INFORMATION FOR *COACHES/PARENTS/SCHOOL NURSES/SCHOOL VOLUNTEERS*

What is a concussion? A concussion is a traumatic brain injury caused by a direct or indirect impact to the head that results in disruption of normal brain function, which may or may not result in loss of consciousness. It can occur from a fall, a blow to the head, or a blow to the body that causes your head and your brain to move quickly back and forth.

How do I recognize a concussion? There are many signs and symptoms a person may experience following concussion that can affect their thinking, emotions or mood, physical abilities, or sleep.

Thinking/Remembering	Physical	Emotional/Mood	Sleep
Difficulty thinking clearly	Headache	Irritability	Sleeping more than usual
Feeling slowed down	Fuzzy or blurry vision	Sadness	Sleeping less than usual
Difficulty concentrating	Nausea/Vomiting	More emotional than normal	Trouble falling asleep
Difficulty remembering new information	Dizziness	Feeling nervous or anxious	
	Balance problems		
	Sensitivity to noise or light		

Table from the Centers for Disease Control and Prevention (<http://www.cdc.gov/concussion/>)

What should I do if I think a student-athlete has sustained a concussion? If you suspect a student-athlete is experiencing any combination of the signs and symptoms listed above, you immediately remove them from participation, let their parents know, and/or refer them to the appropriate medical personnel.

What are the warning signs that a more significant head injury may have occurred? If they have a headache that gets worse over time, experience loss of coordination or abnormal body movements, have repeated nausea, vomiting, or slurred speech, you should refer them to appropriate medical personnel immediately.

What are some of the long-term or cumulative issues that may result from a concussion?

Individuals may have trouble in some of their classes at school or even with activities at home. Down the road, especially if their injury is not managed properly, or if they return to play too early, they may experience issues such as being depressed, not feeling well, or have trouble remembering things for a long time. Once an individual has a concussion, they are also more likely to sustain another concussion.

How do I know when it's ok for a student-athlete to return to participation after a suspected concussion?

Any student-athlete experiencing signs and symptoms consistent with a concussion should be immediately removed from play or practice and referred to appropriate medical personnel. They should not be returned to play or practice on the same day. To return to play or practice, they will need written clearance from a medical professional trained in concussion management.

No athlete should be returned to play or practice while experiencing any concussion-related signs or symptoms following rest or activity.

Ask your licensed athletic trainer, principal, or athletic director about:

The Emergency Action Plan at your school

The concussion policy at your school

What you should do if you suspect a concussion

How to help athletes play their sport in the safest way

This information is provided to you by the UNC Matthew Gfeller Sport-Related TBI Research Center, North Carolina Medical Society, North Carolina Athletic Trainers' Association, Brain Injury Association of North Carolina, North Carolina Neuropsychological Society, and North Carolina High School Athletic Association.

Coach/School Nurse/Parent/Volunteer Concussion Statement

I have read the *Concussion Information Sheet*. If true, please check box.

I should not allow any student-athlete exhibiting signs and symptoms consistent with concussion to return to play or practice on the same day. If you agree, please check box.

After reading the information sheet, I am aware of the following information:

_____ A concussion is a brain injury.

Initial

_____ A concussion can affect a student-athlete's ability to perform everyday activities, their ability to think, their balance, and their classroom performance.

Initial

_____ I realize I cannot see a concussion, but I might notice some of the signs in a student-athlete right away. Other signs/symptoms can show-up hours or days after the injury.

Initial

_____ If I suspect a student-athlete has a concussion, I am responsible for removing them from activity and referring them to a medical professional trained in concussion management.

Initial

_____ Student-athletes need written clearance from a medical professional trained in concussion management to return to play or practice after a concussion.

Initial

_____ I will not allow any student-athlete to return to play or practice if I suspect that he/she has received a blow to the head or body that resulted in signs or symptoms consistent with concussion.

Initial

_____ Following concussion the brain needs time to heal. I understand that student-athletes are much more likely to sustain another concussion or more serious brain injury if they return to play or practice before symptoms resolve.

Initial

_____ In rare cases, repeat concussions can cause serious and long-lasting problems.

Initial

_____ I have read the signs/symptoms listed on the Concussion Information Sheet.

Initial

Signature of Coach/Parent/School Nurse/Volunteer

Date

Printed name of Coach/Parent/School Nurse/Volunteer

CONCUSSION

INFORMATION FOR *STUDENT-ATHLETES*

What is a concussion? A concussion is an injury to the brain caused by a direct or indirect blow to the head. It results in your brain not working like it should. It may or may not cause you to black out or pass out. It can happen to you from a fall, a hit to the head, or a hit to the body that causes your head and your brain to move quickly back and forth.

How do I know if I have a concussion? There are many signs and symptoms that you may have following a concussion that can affect your thinking, the way you feel, your mood, or your sleep. Here is what to look for:

Thinking/Remembering	Physical	Emotional/Mood	Sleep
Difficulty thinking clearly	Headache	Irritability-everything bothers you easily	Sleeping more than usual
Feeling slowed down	Fuzzy or blurry vision	Sadness	Sleeping less than usual
Difficulty concentrating	Feeling sick to your stomach/queasy	More moody	Trouble falling asleep
Difficulty remembering new information	Vomiting/throwing up	Feeling nervous or worried	
	Dizziness		
	Balance problems		
	Sensitivity to noise or light		

Table is adapted from the Centers for Disease Control and Prevention (<http://www.cdc.gov/concussion/>)

What should I do if I think I have a concussion? If you are having any of the signs and symptoms listed above, you should tell your parents, coach, athletic trainer or school nurse so they can get you the help you need.

When should I be particularly concerned? If you have a headache that gets worse over time, you are unable to control your body, you throw up repeatedly or feel more and more sick to your stomach, or your words are coming out funny/slurred, you should let an adult like your parent or coach or teacher know right away, so they can get you the help you need before things get any worse.

What are some of the issues that may affect me after a concussion? You may have trouble in some of your classes at school or even with activities at home. If you continue to play or return to play too early with a concussion, you may have ongoing sadness, not feel like yourself, or have trouble remembering things for a long time. Once you have a concussion, you are more likely to have another concussion.

How do I know when it's ok to return to physical activity and my sport after a concussion? After telling your coach, your parents, and any medical personnel around that you think you have a concussion, you will probably be seen by a doctor trained in helping people with concussions. Your school and your parents can help you decide who is best to treat you and help to make the decision on when you should return to activity/play or practice. Your school will have a policy in place for how to treat concussions. You should not return to play or practice on the same day as your suspected concussion.

You should not have any symptoms at rest or during/after activity when you return to play, as this is a sign your brain has not recovered from the injury.

Ask your licensed athletic trainer, coach, or athletic director about:

The Emergency Action Plan at your school

The concussion policy at your school

What you should do if you have a concussion

How to play your sport in the safest way

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Student-Athlete Concussion Statement

**If there is anything on this sheet that you do not understand, please ask an adult to explain or read it to you.*

I have read the *Student-Athlete Concussion Information Sheet*. *If true, please check box.*

It is my responsibility to tell my parents, my coach, and/or a medical professional about my injuries and illnesses. *If you agree, please check box.*

After reading the information sheet, I am aware of the following information:

_____ A concussion is a brain injury, which I am responsible for reporting to my
Initial coach(es), my parents, or a medical professional if one is available.

_____ A concussion can affect my ability to perform everyday activities, my
Initial ability to think, my balance, and my classroom performance.

_____ I realize I cannot see a concussion, but I might have some of the symptoms
Initial right away. Other symptoms can show up hours or days after the injury.

_____ If I think a teammate has a concussion, I am responsible for telling my
Initial coach(es), my parents, or a medical professional about their concussion.

_____ I will not return to play in a game or practice if a hit to my head or body
Initial causes any concussion-related symptoms.

_____ I need written permission from a medical professional trained in concussion
Initial management to return to play or practice after a concussion.

_____ After a concussion, the brain needs time to heal. I understand that I am
Initial much more likely to have another concussion or more serious brain injury if I return to play or practice before my symptoms go away.

_____ Sometimes, repeat concussions can cause serious and long-lasting problems.
Initial

_____ I have read the concussion symptoms on the Concussion Information Sheet.
Initial

Signature of Student-Athlete

Date

Printed name of Student-Athlete

General Guidelines for Developing Emergency Action Plans

1. **Establish Roles** – adapt to specific team/sport/venue, may be best to have more than one person assigned to each role in case of absence/turnover
 - Immediate care of the athlete
 - Typically physician, ATC, first responder but also those trained in basic life support
 - Activation of Emergency Medical System
 - Could be school administrator, anyone
 - Emergency equipment retrieval
 - Could be student assistant, coach, anyone
 - Direction of EMS to scene
 - Could be administrator, coach, student assistant, anyone

2. **Communication**
 - Primary method
 - May be fixed (landline) or mobile (cellular phone, radio)
 - List all key personnel and all phones associated with this person
 - Back-up method
 - Often a landline
 - Test prior to event
 - Cell phone/radio reception can vary, batteries charged, landline working
 - Make sure communication methods are accessible (identify and post location, identify locks or other barriers, change available for pay-phone)
 - Activation of EMS
 - Identify contact numbers (911, ambulance, police, fire, hospital, poison control, suicide hotline)
 - Prepare script (caller name/location/phone number, nature of emergency, number of victims and their condition, what treatment initiated, specific directions to scene)
 - Post both of the above near communication devices, other visible locations in venue, and circulate to appropriate personnel
 - Inform EMS ahead of time of location of facilities/venues
 - Student emergency information
 - Critical medical information (conditions, medications, allergies)
 - Emergency contact information (parent / guardian)
 - Accessible (keep with athletic trainer for example)

3. **Emergency Equipment**
 - e.g. Automated External Defibrillators, bag-valve mask, spine board, splints
 - Personnel trained in advance on proper use
 - Must be accessible (identify and post location, within acceptable distance for each venue, identify locks or other barriers)
 - Proper condition and maintenance
 - document inspection (log book)

4. **Emergency Transportation**
 - Ambulance on site for high risk events (know difference between basic life support and advanced life support vehicles / personnel)
 - Designated location
 - Clear route for exiting venue

- When ambulance not on site
 - Entrance to venue clearly marked and accessible
 - Identify parking/loading point and confirm area is clear
- Coordinate ahead of time with local emergency medical services

5. Additional considerations

- Must be venue specific (football field, gymnasium, other)
- Specify who will be in charge (athletic trainer, EMT, other) during an emergency situation
- Put plan in writing
- Involve all appropriate personnel (administrators, coaches, sports medicine, EMS)
 - Development
 - Approval with signatures
- Post the plan in visible areas of each venue and distribute
- Review plan at least annually
- Rehearse plan at least annually
- Document
 - Events of emergency situation
 - Evaluation of response
 - Rehearsal, training, equipment maintenance
- Must be reviewed by an athletic trainer licensed in North Carolina

Specific considerations for *Head and Neck Injury*:

- Athletic trainer / First responder should be prepared to remove the face-mask from a football helmet in order to access a victim's airway without moving the cervical spine
- Sports medicine team should communicate ahead of time with local EMS to establish:
 - Agreed upon C-spine immobilization techniques (e.g. leave helmet and shoulder pads on for football players) which meet current local and national recommendations/standards
 - Type of immobilization equipment to be available on-site and/or provided by EMS
- Athletes and coaches should be trained not to move victims

Gfeller-Waller Concussion Clearance Form

This form is adapted from the Acute Concussion Evaluation (ACE) care plan on the CDC web site (<http://www.cdc.gov/concussion/index.html>) as well as the NCHSAA Concussion Return to Play Form. All medical providers are encouraged to review this site if they have questions regarding the latest information on the evaluation and care of the scholastic athlete following a concussion injury. **Medical providers, please initial any recommendations that you select.**

Athlete's Name _____

Date of Birth: _____

School: _____

Team/Sport: _____

HISTORY OF INJURY

Person Completing Form (Circle One): Athletic Trainer | First Responder | Coach | Parent |

Student

Date of Injury: _____

Please see attached information Please see further history on back of

this form

Did the athlete have: (Circle one)

Loss of consciousness or unresponsiveness? YES | NO

Seizure or convulsive activity? YES | NO

Balance problem / unsteadiness? YES | NO

| NO Dizziness? YES | NO

| NO Headache? YES | NO

| NO Nausea? YES | NO

| NO

Emotional instability (abnormal laughing, YES | NO

crying, smiling, anger)?

Confusion? YES | NO

| NO Difficulty concentrating? YES | NO

| NO Vision Problems? YES | NO

| NO Other. YES | NO

| NO

Duration / Resolution

Duration: _____

Duration: _____

IF YES, HAS THIS RESOLVED? YES

IF YES, HAS THIS RESOLVED? YES

IF YES, HAS THIS RESOLVED? YES

IF YES, HAS THIS RESOLVED? YES

IF YES, HAS THIS RESOLVED? YES | NO

IF YES, HAS THIS RESOLVED? YES

IF YES, HAS THIS RESOLVED? YES

IF YES, HAS THIS RESOLVED? YES

IF YES, HAS THIS RESOLVED? YES

Signature: _____

Date: _____

MEDICAL PROVIDER RECOMMENDATIONS

today's evaluation.

This return to play plan is based on

RETURN TO SPORTS

PLEASE NOTE:

1. Athletes should not return to practice or play the same day that their head injury occurred.
2. Athletes should never return to play or practice if they still have **ANY symptoms**.
3. Athletes, be sure that your coach and /or athletic trainer are aware of your injury, symptoms, and has the contact information for the treating physician.

SCHOOL (ACADEMICS):
until follow-up visit.

May return to school now

May return to school on

Out of school

PHYSICAL EDUCATION:
class at this time.

Do **NOT** Return to PE

May Return to PE class SPORTS:

Do not return to sports practice or competition at this time.

May gradually return to sports practices under the supervision of the health care provider for your

school or team

May be advanced back to competition after phone conversation with attending physician.

Must return to medical provider for final clearance to return to competition.

- OR -

restriction.

Cleared for full participation in all activities without

Physician (required) _____

Medical Provider (optional) _____

MD|DO (circle one) _____

Neuropsychologist|LAT, ATC|NP|PA-C (circle one) _____

Office Address/Phone Number _____

Office Address/Phone Number _____

Signature _____ Date _____

Signature _____ Date _____

Gradual Return to Play Plan: Return to play should occur in gradual steps beginning with light aerobic exercise only to increase your heart rate (e.g. stationary cycle); moving to increasing your heart rate with movement (e.g. running); then adding controlled contact if appropriate; and finally return to sports competition. Pay careful attention to your symptoms and your thinking and concentration skills at each stage or activity. After completion of each step without recurrence of symptoms, you can move to the next level of activity the next day. Move to the next

level of activity ONLY if you do not experience any symptoms at the present level. If your symptoms return, let your health care provider know, return to the first level and restart the program gradually.

Day 1: Low levels of physical activity (i.e. symptoms do not come back during or after the activity). This includes walking, light jogging, light stationary biking, and light weightlifting (low weight – moderate reps, no bench, no squats).

Day 2: Moderate levels of physical activity with body/head movement. This includes moderate jogging, brief running, moderate intensity on the stationary cycle, moderate intensity weightlifting (reduce time and or reduced weight from your typical routine).

Day 3: Heavy non-contact physical activity. This includes sprinting/running, high intensity stationary cycling, completing the regular lifting routine, non-contact sport specific drills (agility – with 3 planes of movement).

Day 4: Non-Contact, sports-specific practice.

Day 5: Full contact in controlled drill(s) or practice.

Day 6: Return to competition.