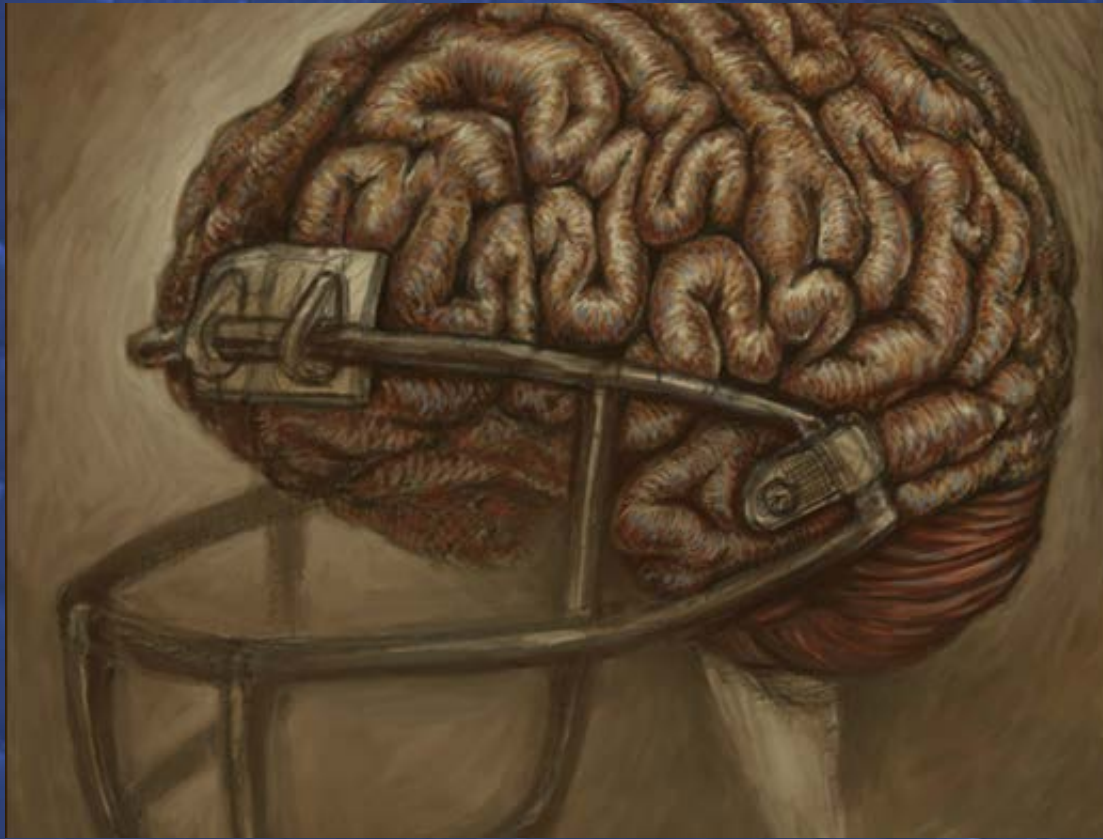




High School Outreach Lecture Series | September 25th, 2012

Managing Concussions in the Office



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UF & Shands Orthopaedic & Sports Medicine Institute

So far...

- Your son/daughter/athlete is suspected of a concussion
- Evaluation by ATC on Field of Play
- Now What??

Communication

- ATC → Team Physician (if there is one)
- Will require formal office evaluation

Crystal Bright, LPN
brighc@ortho.ufl.edu
(OSMI) 352-273-7001
(fax) 352-273-7294

Gwen S. Werner
Program Assistant
Division of Sports Med.
wernegs@ortho.ufl.edu
(o) 352-273-7017

Availability

- We have concussion slots daily in the afternoon
 - Ages 11- 18
 - Available for the management of the important issue of sports related concussion

OSMI Concussion Specialists

- Dr. Jay Clugston



- Dr. M. Seth Smith



- Dr. Bryan Prine



- Dr. Jason Zaremski



When you arrive

INITIAL ASSESSMENT

- **SCAT2**
- **BESS**
- **ImPACT**

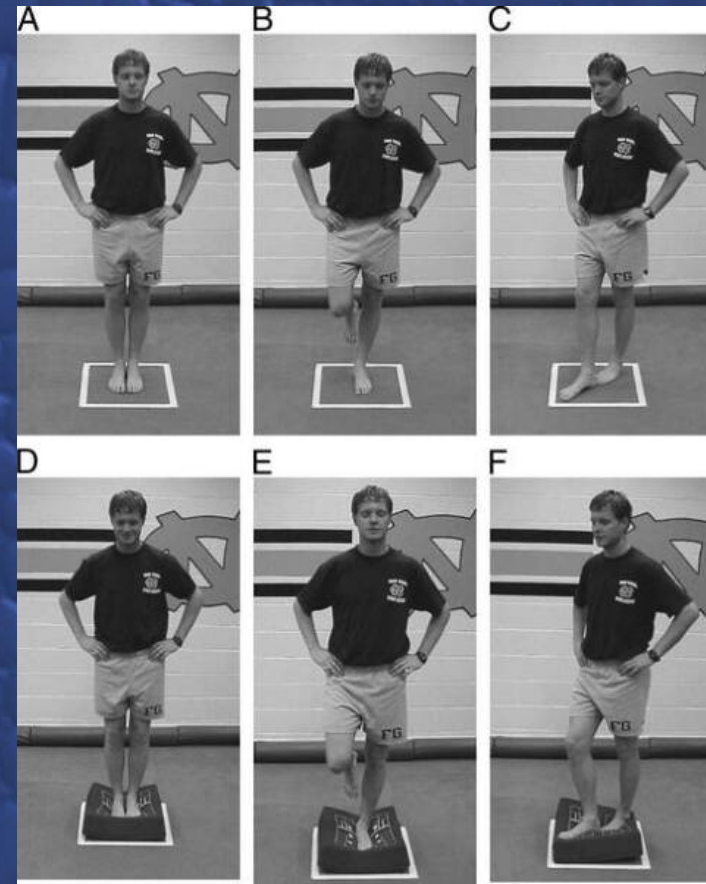
SCAT2

- Sport Concussion Assessment Tool 2
- Standardized method of evaluating athletes 10 years and older for concussion.
- Screening evaluation tool designed for use only by qualified first responders or medical professionals.
- The SCAT2 score does not independently determine the diagnosis of a concussion, nor does it independently determine the injured athlete's recovery or return to play status.

Postural Stability Testing

Balance Error Scoring System

- Portable, cost-effective and objective method of assessing static postural stability.
- Double leg stance, single leg stance, and tandem stance testing.
- Each of the trials is 20 seconds



Neuropsychological Testing

- ImPACT (Immediate Post-Concussion

Assessment & Cognitive Testing)

WHAT THIS TEST LOOKS AT

- Memory (Verbal and Visual)
- Visual Motor
- Reaction Time
- Impulse Control



OSMI Concussion Specialist

- Review all data so far
- Review Neuropsychological Testing
- Begin History and Physical Examination
 - How many concussions? Any Loss of Consciousness?
 - Is your school performance affected?
 - Personality changes? Sleeping/eating more or less?

So Doc...can I play or what??

- Do you have symptoms or don't you?
- Compare the ENTIRE concussion assessment to baseline

Symptom Free?

- Return to Play Algorithm!
- FHSAA Form 18
 - Communication between ATC and Physician



Post Head Injury/Concussion Initial Return to Participation

(Page 1 of 2)

This completed form must be kept on file at the student-athlete's school.

Student Name: _____ School: _____ DOB: ____/____/____

Sport: _____ Date of Injury: ____/____/____

I certify that the above listed student-athlete has been evaluated for a concussive head injury, is currently asymptomatic with a normal neurological examination, off of all medications related to this concussive injury and (as available) all computerized neurological tests have returned to baseline (Zurich Stage 1). **The student-athlete named above is cleared to begin a graded return to play protocol (outline below) under the supervision of an athletic trainer, coach or other health care professional as of the date indicated below.**

Date Cleared for Graded Return to Play Protocol: ____/____/____

If the student-athlete experiences a return of any of his/her concussion symptoms while attempting a graded return to play, the student-athlete is instructed to stop play immediately and notify a parent, licensed athletic trainer or coach.

Physician Name: _____ Signature/Degree: _____

Phone: (____) _____ Fax: (____) _____ Date: ____/____/____

Graded Return to Play Protocol

Each step should take at least 24 hours to complete. If the athlete experiences a return of any concussion symptoms they must immediately stop activity, wait at least 24 hours or until asymptomatic, and drop back to the previous asymptomatic level. This protocol **must be performed under supervision**. Please initial and date the box next to each completed step.

Once the athlete has completed full practice (i.e. stage 4), please sign and date below and return this form to the student-athlete's physician (MD/DO) for review and request the physician complete the return to competition form for the athlete to resume full activity.

Rehabilitation stage	Functional exercise at each stage	Objective	Date completed	Initials
1. Light aerobic exercise	Walking, swimming, stationary bike, HR < 70% maximum	Increased heart rate		
2. Sport-specific exercise	Non-contact drills	Add movement		
3. Non-contact training	Complex (non-contact) drills/practice	Exercise, coordination and cognitive load		
4. Full contact practice	Full contact practice	Restore confidence and simulate game situations		

I attest the above-named student-athlete has completed the graded return to play protocol as dated above.

Athletic Trainer/Coach Name: _____ Signature: _____ Date: ____/____/____

(if athletic trainer) AT License Number: _____ Phone: (____) _____

(if coach) AD/Principal Name: _____ School: _____ Phone: (____) _____

Student-Athlete Signature: _____ Date: ____/____/____

Physician Reviewed:

Physician

ATC

Return to play protocol

EACH STAGE = 24 HOURS WITHOUT SYMPTOMS.
IF SYMPTOMS RETURN, GO BACK TO REST STAGE

No activity, complete rest. Once symptom free and cognitive recovery is demonstrated, proceed to STAGE 1.

1. Light aerobic exercise such as walking or stationary cycling
2. Sport specific training (e.g. running drills, ball handling skills)
3. Non-contact training drills
4. Full contact training after medical clearance

CLEARED FOR GAME COMPETITION

Each stage separated by 24 hours

Still Have Symptoms?

- Not Cleared
- Cognitive Rest
- The Athlete & Parent(s)/Guardian to stay in close contact with ATC

Cognitive Rest

- Limit brain activity to keep concussion signs from coming back or getting worse.

Cognitive Rest *Could* Mean...

- Time off from school
- No homework
- No reading
- No visually stimulating activities, such as computers, video games, texting or use of cell phones, and limited or no television
- No exercise, athletics, chores that result in perspiration/exertion
- No trips, social visits in or out of the home
- Increased rest and sleep

1st Study to Prove Cognitive Rest

Moser RS, Glatts C, Schatz P. Efficacy of Immediate and Delayed Cognitive and Physical Rest for Treatment of Sport-Related Concussion. *J Pediatrics*, (epub) May 22nd, 2012.

- Preliminary data suggest that a period of cognitive and physical rest may be a useful means of treating concussion-related symptoms, whether applied soon after a concussion or weeks to months later.

Symptoms Not Improving

- Concern for Post-Concussion Syndrome
- Need advanced evaluation

UF/Shands Psychology Clinic

- Russell M. Bauer, Ph.D., ABPP
 - Adult TBI/concussion, memory and attention retraining, training physicians in office-based tools
- Duane Dede, Ph.D.
 - Adult TBI/concussion; academic reintegration and accommodations for disability; learning disability
- Shelley Heaton, Ph.D.
 - Pediatric TBI/concussion; academic issues; learning disability



Emergency Department Contact

- Latha Ganti Stead, M.D.
 - Traumatic Brain Injury Program
 - (352) 265-5911
 - Can direct athletes who need more than a sideline assessment or prompt attention, but have not yet had an office assessment



Neurology Department Contact

- Bayard Miller, M.D.
(352) 273-5550



Florida's Concussion Law

- House Bill No. 291/Senate Bill No. 256
- Filed April 27, 2012
- **Effective July 1, 2012**

What does it say

- Guidelines to educate athletic coaches, officials, administrators, and youth athletes and their parents or guardians of the nature and risk of concussion and head injury.
- Require the parent or guardian to sign & return an informed consent that explains the nature and risk of concussion and head injury, including the risk of continuing to play after concussion or head injury, each year before participating in athletic competition

- Require each youth athlete who is suspected of sustaining a concussion or head injury in a practice or competition to be immediately removed from the activity.
- A youth athlete who has been removed from an activity may not return to practice or competition until the youth submits to the athletic coach a written medical clearance to return stating that the youth athlete no longer exhibits signs, symptoms, or behaviors consistent with a concussion or other head injury.
- Medical clearance must be authorized by the appropriate health care practitioner trained in the diagnosis, evaluation, and management of concussions as defined by the Sports Medicine Advisory Committee of the Florida High School Athletic Association.

#38!

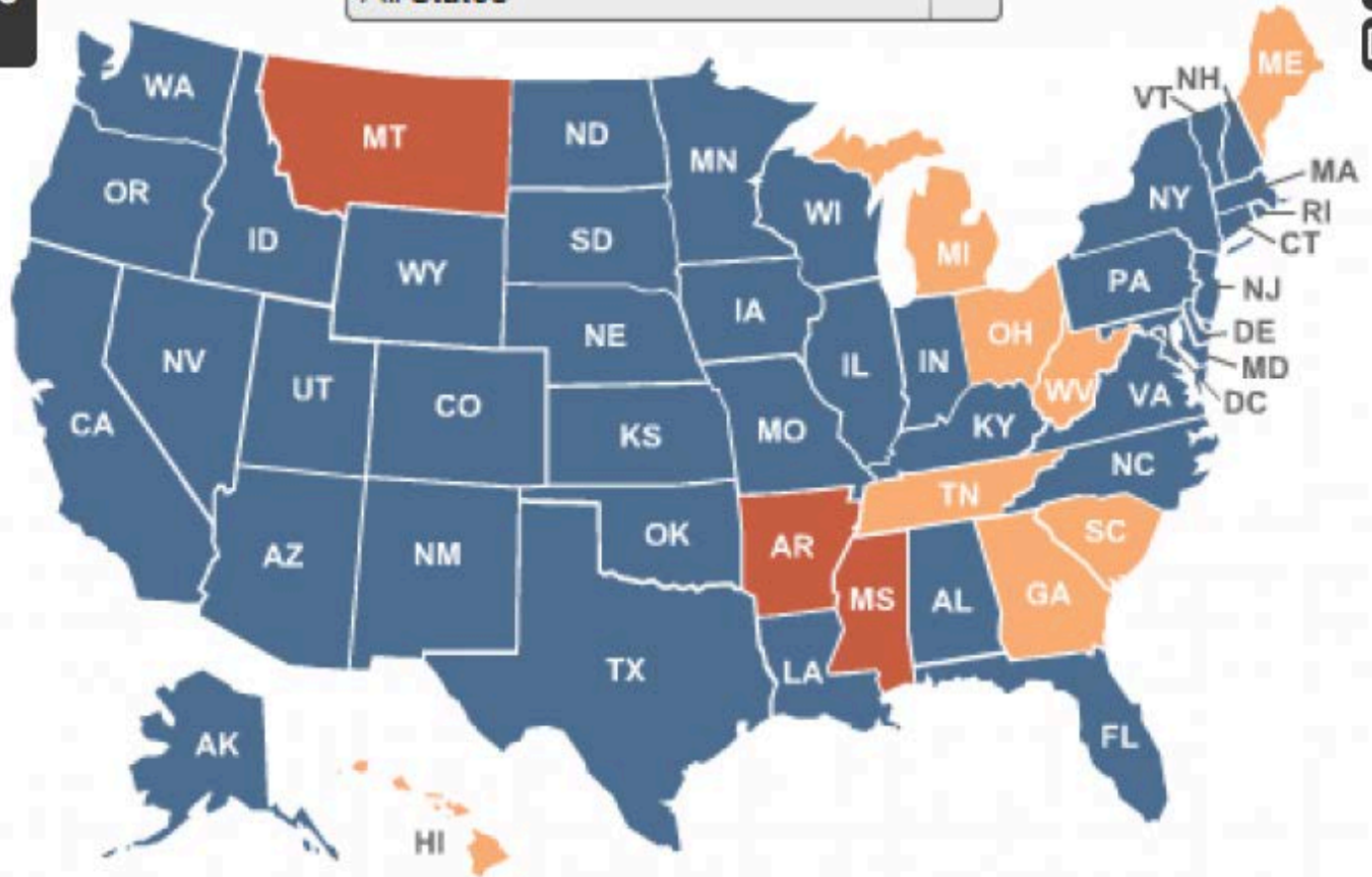
Concussion Laws By State

By Education Week

All States



Click on a state for detailed information.



LEGISLATION STATUS : PASSED PENDING PASSAGE NONE

Source: Education Week

Good Websites

- <http://www.impacttest.com/>
- <http://www.stopsportsinjuries.org/>
- <http://www.fhsaa.org/>

Coming Soon

- Next High School Community Outreach Talk
– WINTER 2012 (Baseball/Softball and Throwing)

Thank you!



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Any questions?