

Be Smart About the Brain

A concussion is a traumatic injury to the brain that affects how the brain functions. Early diagnosis and correct treatment are important to recovery and return to play. Children and adolescents are particularly sensitive to the effects of concussion which, if not managed properly, can lead to prolonged time away from sports and school – or even long term problems.

Ochsner Health System is dedicated to enhancing athletes' health on and off the field by helping to educate athletes, families and coaches about concussion and concussion management.



For evaluation after a head trauma, or to set up preseason baseline testing, contact the Ochsner Concussion Management Program. Call **866.624.7637** or go online to **ochsner.org/concussion**.

Know the Facts

Children, adolescents, and adults are all at risk for concussion with common causes including sports, recreational activities, falls, and motor vehicle collisions. Emergency room visits for concussions in children and adolescents ages 8 to 13 years old has doubled, and concussions have risen 200 percent among teens ages 14 to 19 in the last decade, according to the American Academy of Pediatrics.



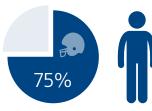
Approximate percentage of **HEAD INJURIES** that are concussions.

Youths who have already had a concussion are at higher risk for subsequent ones.



Football is the most common sport with **CONCUSSION RISK FOR MALES**.

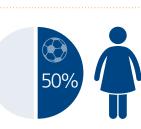
75% chance that boys who play football will have a concussion.*





Soccer is the most common sport with **CONCUSSION RISK FOR FEMALES**

50% chance that girls who play soccer will have a concussion.*



While loss of consciousness is associated with **FEWER THAN 20% OF CONCUSSIONS**, a loss of consciousness or loss of memory after a head injury implies that a concussion has occurred.

How to Recognize a Concussion

A concussion may be caused by a bump, blow or jolt to the head or body. Signs and symptoms may show up soon after the injury or can be evident hours or days later. Observe for these signs or symptoms immediately after the injury and again a few days later:

Headache or a feeling dazed or stunned	Dizziness or balance difficulties
Acts confused or unable to follow directions	Headache or a feeling of pressure in the head
Slow to answer questions	Changes in behavior or personality
Ringing in the ears	Fatigue
Difficulty remembering things	Nausea
Sensitivity to light or noise	Difficulty falling or staying asleep
Blurred or double vision	Difficulty maintaining focus or concentration



Remember, a person does not have to lose consciousness to have had a concussion.

When to call 9-1-1

Although rare, the following symptoms after a closed head injury should be considered an emergency, and emergency services should be called:

- Severely worsening headache or Slurred speech headache waking one from sleep
- Unremitting vomiting
- Irregular breathing

- Weakness/numbness in an extremity
- Seizure

How to Care for the Child with a Concussion

Once treated, your doctor will ask you to follow these instructions to help your child with recovery:



Things Your Child Should Do:

- Maintain a consistent bedtime routine, aiming for 8 hours of sleep each night.
- Limit cognitive stressors by taking a 30 minute break for every 30 minutes of watching TV or movies, using a computer or cell phone, reading, or doing homework.
- Walk at a moderate pace 1-2 times a day for 15-30 minutes.
- Maintain proper hydration drink a half gallon or more of non-caffeinated beverages daily.

Things Your Child **Should Not Do**:

- Drink caffeinated beverages.
- Use headache medicine such as Tylenol or Advil more than 4-5 times in a week as this may lead to rebound headaches.
- Return to athletics without medical clearance.
- Return to PF class or recess without medical clearance
- Be kept lying in bed, in a darkened, silenced room. This is generally not necessary or recommended.



If You Notice These Signs Three or Four Days After **Diagnosis, Call Your Concussion Doctor:**

- Severely worsening headaches or headaches after waking up.
- Increased daytime drowsiness or difficulty waking up.
- Problems with recognizing people or places.
- Other symptoms listed under "When to call 9-1-1."

If You Suspect a Athlete **Has a Concussion**

keep them out of play.

for the child to return to play.

- Remove the athlete from the game or activity The parent should notify the school when a student is returning after Look for these symptoms: headache, unsteadiness, confusion,
- Ensure the athlete gets medically evaluated Do not try to judge the severity of the injury yourself. Inform the parent or guardian about the injury. Ask them to have the athlete medically evaluated and to provide you with a medical clearance

abnormal behavior. If the athlete exhibits any of these signs,

or if you are not sure if the athlete has sustained a concussion,

- Return the athlete to practices and games with a plan When the athlete is cleared to return to play, make sure he or she does so in steps with a graduated return to play protocol prescribed by his physician and does not experience any return of concussion symptoms. This "RTP" protocol generally includes the following steps:
 - Light aerobic activity such as walking, gentle swimming or gentle stretching exercises
 - Heavier aerobic activity such as running or cycling
 - Sport-specific conditioning drills
 - Non-contact practice drills
 - Resistance strength training
 - Full practice without restrictions

Teach your athletes it's not smart to play with a concussion. Sometimes people wrongly believe that it shows strength and courage to play injured. Don't let anyone convince you a athlete can "tough it out" in order to remain in a game or practice. Playing with a concussion is very dangerous and can lead to prolonged, chronic symptoms, referred to as post-concussion syndrome. In extremely rare cases, death due to catastrophic brain swelling can occur, known as second impact syndrome.

- a concussion. Special accommodations may be provided, upon doctor recommendation, for:
- A modified school schedule

to School

- Rest periods in the nurse's office between classes
- No participation in PE class or recess
- Reduced or extended time for homework and projects
- Rescheduling of tests, final exams or papers

Guidelines for Returning



This information is for quidance only and does not represent the full spectrum of signs, symptoms or treatment protocols for a concussion. To learn more, go to the Centers for Disease Control website at cdc.gov/headsup/.

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About the Ochsner Concussion Management Program

The Ochsner Concussion Management Program focuses on fast diagnosis and the most effective treatment to get athletes back on the playing field as quickly and safely as possible. Individualized treatment is designed to:

- Lessen recovery time
- Lower the risk of persistent, long-term neuro-cognitive deficits
- Prevent potential catastrophic events such as second impact syndrome
- Reduce the risk of repeat concussion
- Recognize and treat persisting concussion symptoms requiring more than just rest to resolve

This program is the first and largest of its kind in the Gulf South, and features:

- Patient assessment by board-certified physicians each with specialized training in the field of concussion management.
- Multi-faceted evaluation including neurologic, neurocognitive, and balance examinations.
- Focused evaluation of memory, processing speed and other related functions.
- Prompt development of an individualized, medical treatment plan
- Support services including serial assessment, concussion education, counseling, return-to-play surveillance and cognitive therapy.
- Referrals, when necessary, to our extensive network of pediatric and adult specialists and ancillary medical professionals.
- All physicians in the Ochsner Concussion Management Program have completed fellowship training in Sports Medicine, Sports Neurology, or Traumatic Brain Injury.



Getting Athletes Back on the Field as Quickly & Safely as Possible



In addition, the Ochsner Concussion Management Program uses ImPACT, the advanced computerized concussion evaluation system, which is at the forefront of concussion management and treatment. Careful evaluation of memory, processing speed, reaction time and other neurocognitive function utilizing a variety of screening tests. This is the same program used by the NFL, NHL, NASCAR, professional boxing and more than 400 colleges and universities to aid with the diagnosis and management of concussions.

Our Concussion Management Team

Ochsner Concussion Management Program Locations



Aaron Karlin, MD

Director, Ochsner Concussion Management Program Chairmain, Dept. Physical Medicine & Rehabilitation

Residency training: Pediatrics and Physical Medicine & Rehabiliation Fellowship training: Sports Medicine



Matthew McQueen, MD

Primary Care Sports Medicine

Residency: Family Practice Fellowship: Sports Medicine



Jose Posas, MD

Sports Neurology

Residency: Neurology

Fellowship: Sports Neurology



Andrew Gottschalk, MD

Primary Care Sports Medicine

Residency: Family Practice

Fellowship: Sports Medicine



Korak Sarkar, MD

Neurology

Residency: Neurology

Fellowship: Traumatic Brain Injury



Nicholas Goyeneche, MD

Physical Medicine & Rehabilitation and Sports Medicine

Residency: Physical Medicine & Rehabilitation

Fellowship: Sports Medicine

Concussion evaluation and treatment is conveniently available throughout Louisiana:

Ochsner Health Center for Children – Covington

101 E. Judge Tanner Blvd.

Suite 302

Covington, LA 70433

985.809.5800

Ochsner Sports Medicine Institute

1221 Clearview Pkwy. Metairie, LA 70121 **504.736.4800**

Ochsner Hospital for Children

1514 Jefferson Hwy. New Orleans, LA 70121

504.842.3900

Ochsner Baptist

2820 Napoleon Ave., Suite 810 New Orleans, LA 70115 **504.894.2700**

Ochsner Health Center – Covington

1000 Ochsner Blvd. Covington, LA 70433 **985.875.2828**

Ochsner Health Center – Slidell

2750 E. Gause Blvd. Slidell, LA 70461 **985.639.3755**

For evaluation after a head trauma or to set up pre-season baseline ImPACT testing for your child or athletes, contact the Ochsner Concussion Management Program. Call **866.624.7637** or go online to **ochsner.org/concussion**.



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