

# CONCUSSION MANAGEMENT: GETTING IT RIGHT



According to our research, one in 10 high school athletes in the United States who play contact sports will suffer a concussion this year.

Fortunately, our knowledge about concussions has grown tremendously since we began treating patients more than a decade ago. We've thoroughly studied athletes of all ages, and firmly believe that the most effective plan to prevent future concussions is to utilize a comprehensive team to properly assess, manage, and rehabilitate concussions.

## **A Well-Managed Concussion is the Best Form of Prevention**

Any level of concussion is a serious medical issue that requires prompt clinical attention by a health professional trained in concussions.

To avoid repeat injury, it's critical to manage concussions until complete recovery.

Our program consists of **over 30 faculty and staff** to offer your child a personalized, multidisciplinary approach to concussion management. Our experts include:

- Neuropsychologists
- Primary care sports medicine physicians
- Neurosurgeons
- Physical medicine and rehabilitation physicians
- Neurovestibular and exertional physical therapists
- Cognitive rehabilitation specialists
- Certified athletic trainers

Because no two cases are alike, there is no simple timetable for recovery. Some athletes recover in days, others require weeks or months, and some may endure long-term effects. Any level of concussion is a serious medical issue that requires prompt clinical attention by a health professional trained in concussion treatment and management.

If you suspect your child has suffered a concussion, or would like to learn more about the UPMC Sports Medicine Concussion Program, call **412-432-3681**.

## **When can an athlete return to play after a concussion?**

An athlete should not participate in sports practices, games, physical education class, or other physical activity when symptoms are present. The injured person should never return to sports or active recreation with any symptoms unless directed by a health care professional trained in the management of concussion. A written release from a concussion-trained professional is required for an athlete to return to competition. In fact, it's a state law for school district-sponsored sports.

## **Did You Know?**

The UPMC Sports Medicine Concussion Program is the region's largest program dedicated to the assessment, management, and rehabilitation of concussion.

With more than 17,000 patient visits each year, our experts see athletes from 26 states, including:

- High school, collegiate, and professional athletes - including many from the NFL, NHL, and MLB
- Student athletes from 27 colleges and universities from around the country

Our program continues to set the standards of care, developing concussion management protocols and return-to-play guidelines adopted by other facilities throughout the United States.

Our experts have published nearly 200 peer-reviewed research studies on concussion - more than any other program in the country.

In partnership with the Pittsburgh Penguins Foundation, the *Heads UP* program administers more than 3,000 ImPACT® baseline concussion tests to student athletes in western Pennsylvania in a single year. The UPMC Sports Medicine Concussion Program has administered more than 70,000 neurocognitive baseline concussion tests.

UPMC Sports Medicine

## Approach to Care

Founded in 2000, the UPMC Sports Medicine concussion program manages every aspect of concussion. Our evidence-based medical approach is designed to assess, manage, and rehabilitate concussions in athletes of all ages. We offer comprehensive treatment programs to help get athletes back on the field safely.

## Concussion Assessment and Management

The neuropsychologists at the UPMC Sports Medicine Concussion Program evaluate head injuries and perform thorough clinical interviews. We conduct neurocognitive testing and use this collective data to develop a personalized concussion treatment and management plan, which may include:

- Neurosurgical, neuro-otology, physical medicine and rehabilitation, and orthopaedic evaluations
- Neuroradiology/neuroimaging
- Medication management
- Vestibular evaluation and therapy
- Physical and exertion training and rehabilitation
- Behavioral neuro-optometry and vision therapy

## Concussion Treatment

Our treatment specialists may prescribe physical therapy to treat symptoms of this brain injury. If certain symptoms persist, they may also prescribe medications to help treat emotional, mood, sleep, and cognitive concussion symptoms. Patients are continually re-examined to help promote successful rehabilitation.

## Concussion Rehabilitation

The neurovestibular experts at the UPMC Sports Medicine Concussion Program:

- Test for and treat balance and ocular problems — two potential symptoms of concussions.
- Work with physical therapists from the UPMC Center for Balance Disorders to begin vestibular therapy.
- Use techniques that help retrain the brain to understand complex environments that include space, motion, and head/eye movements, with exercises that focus on vision, balance, motion, and gait.

## Graduated Return to Play

Once an athlete is symptom free, he or she may undergo a structured exertional program supervised by the school certified athletic trainer or a physical therapist. The UPMC Sports Medicine exertional program consists of a graduated multi-stage protocol. The last step is a final clearance that assesses any underlying symptoms of concussion, and includes sport-specific

# Safety in Youth Sports Act

UPMC Sports Medicine Concussion Program experts worked with state officials to develop the Pennsylvania Safety in Youth Sports Act. Enacted in 2012, it sets uniform standards for managing concussions and traumatic brain injuries in student athletes taking part in school district-sponsored sports. The act also:

- States that only a licensed physician, licensed neuropsychologist, or other licensed medical professional *trained in the diagnosis and management of concussion* can treat and release a student athlete for return to play.
- Encourages schools to hold informational meetings prior to the start of each athletic season, to discuss the importance of proper concussion management.
- Imposes stiff penalties to those not complying with the act.

This is why family doctors and pediatricians who are not formally trained in concussion management should ensure that their patients are getting the best care possible. **The experts at the UPMC Sports Medicine Concussion Program are thoroughly trained in all aspects of concussion management and treatment.**

movements and drills. This structured program is required of all athletes prior to final clearance, and ensures that he or she meets return-to-play criteria.

## Our locations

UPMC Center for Sports Medicine  
3200 S. Water St., Pittsburgh, PA 15203

Kaufmann Medical Building  
3471 Fifth Ave., Pittsburgh, PA 15213

Monroeville  
600 Oxford Drive, Monroeville, PA 15146

UPMC South Hills  
1300 Oxford Drive, Bethel Park, PA 15102

Pine Township  
11279 Perry Highway, Pine Center 2nd Floor, Wexford, PA 15090

To learn more, please visit [UPMC.com/Concussion](http://UPMC.com/Concussion) or call **412-432-3681** to schedule an appointment.

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