

# CONCUSSION **Implications for the** Classroom

# A guide for student-athletes, parents, professors, sport psychologists, and other university staff

## WHAT is a Concussion...

Concussion is a mild traumatic brain injury that occurs when a blow or jolt to the head disrupts the normal functioning of the brain. According to the Center for Disease Control (CDC), "traumatic brain injury can cause a wide range of short or long term changes affecting thinking, sensation, language, or emotions." These changes may lead to problems with memory and communication, personality changes, as well as occasional depression.

## Concussion can occur from a blow to the head/body:

- Following helmet to helmet contact
- Contact with the ground, object or another player
- Whiplash

## **FACTS about Concussion...**

- More than a million Americans sustain a concussion each year ٠
- A concussion does not always "knock out" or render unconscious the injured party
- Symptoms of a concussion can last, hours, days, weeks, months, or indefinitely
- Concussion can cause disability affecting academics, internships, social interactions, or athletics ٠
- Returning to participation/activity before complete recovery from a concussion may increase risks of short and long-term complications

## WHAT is Post-Concussion Syndrome (PCS)...

Post-concussion syndrome is a collection of cognitive, physical, and social/emotional symptoms that persist for a varying amount of time after concussion. Some symptoms are immediate; others may not appear or be noticed for days or weeks after injury. Likewise, some symptoms may resolve fairly quickly but others can last much longer.



The number and severity of symptoms, the speed of recovery, and the impact of symptoms on academic and social functioning will be different for each student-athlete.

#### **Concussion Management Model**

## **Cognitive symptoms**

- Difficulty concentrating
- ✓ Feeling "in a fog"
- ✓ Confusion
- Amnesia/difficulty remembering
- ✓ Trouble with learning and memory
- Problems putting thoughts into words
- ✓ Easily confused
- ✓ Slower thinking, acting, reading, and speaking
- ✓ Easily distracted
- ✓ Trouble multitasking
- Lack of organization in everyday tasks

# Social and emotional symptoms

- Mood changes including irritability, anxiousness, and tearfulness
- ✓ Decreased motivation
- ✓ Easily overwhelmed
- More impulsive and disinhibited
- ✓ Withdrawn from social situations

# **Physical symptoms**

- ✓ Headache
- Neck pain
- ✓ Slowed reaction time
- ✓ Nausea
- ✓ Lack of energy
- Feeling physically and mentally tired
- ✓ Dizziness
- ✓ Balance problems
- ✓ Blurred or double vision
- ✓ Sensitivity to light or noise
- Ringing in ears
- ✓ Loss of sense of taste and smell
- ✓ Difficulty sleeping
- ✓ Loss of consciousness

## Therapeutic goal

Limit cognitive activity: Concentration, learning, memory

## Physical fatigue and mental exertion may cause a temporary worsening of symptoms.



- Recovery faces predictable challenges in the academic realm. Because of this, faculty and staff play an important role in the student-athlete's recovery from a concussion.
- A team approach is most helpful. It is important to maintain communication between parents, professors, staff and medical professionals.

## How long does it take to recover and when it is safe to return to full academic participation after a concussion?

Most recover fully from a concussion, but it can take weeks, months, and even years. Recovery may take longer in those with a previous history of concussion, learning disability, or attention disorder. The student must be asymptomatic at rest and sustain a specific level of cognitive activity without return of symptoms. These conditions are prerequisites for possible return to athletic activities.

#### When is it safe to return to athletic participation after a concussion?

Student athletes should not return to participation after a concussion until symptom free for a specified period of time. The length of time depends on the student-athlete's history, the severity of the injury, and other factors. \*For complete guidelines please refer to Lehigh Sports Medicine Concussion Management Plan (www.lehighsports.com/sportsmed)

# **Cognitive Management = Academic Management**