

A concussion is a brain injury which results in a temporary disruption of normal brain function. A concussion is caused by a bump, blow or jolt to the head or body. Even what seems to be a mild bump to the head can be serious. A student-athlete does not have to lose consciousness (“knocked-out”) to suffer a concussion. A concussion may cause multiple symptoms. Many symptoms appear immediately after the injury, while others may develop over the next several days or weeks. The symptoms may be subtle and are often difficult to fully recognize.

Physical		Cognitive	Emotional	Sleep
Headache	Visual Problems	Feeling Foggy	Irritability	Drowsiness
Nausea/ vomiting	Fatigue	Feeling slowed down	Sadness	Sleeping less than normal
Dizziness	Sensitive to light and sound	Difficulty remembering stuff	Extra sensitive emotions	Sleeping more than normal
Balance problems	Numbness or tingling sensations	Trouble concentrating	Nervousness	Difficulty falling asleep

**When should I take my child to the doctor?**

All student-athletes who sustain a concussion need to be evaluated by a licensed health care professional who is familiar with sports concussion diagnosis and management. St. Luke’s Sports Medicine offers the services of a licensed physician who is trained in the evaluation and management of sport related concussions. Please see contact information below for a St. Luke’s concussion trained physician.

**Kevin Waninger, MD, MS**

Appointments / Office Hours

Appointments can be made by calling 484-526-3884. Physicians can be reached after-hours thru the hospital answering service.

Monday - 1:30 to 4:30 pm

Tuesday - 5:30 to 8 pm

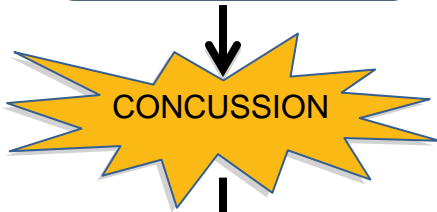
Wednesday - 10 am to 1 pm

Thursday - 1:30 to 4:30 pm

Friday - 8:30 am to 4:30 pm

PRE-SEASON

- Education
- Baseline Testing



ACUTE STAGE

- Follow Emergency Protocol
- Sideline Assessment

Emergency Department with worsening symptoms

MANAGEMENT STAGE

- Referral to St. Luke's Concussion Specialist
- Individualized plan of care
- Assessment of Return to play and Return to School

Not Cleared

MANAGEMENT STAGE

- Rest until Symptom-Free
- Return to School
- Identify need for rehabilitation
- Additional testing as needed

Effective concussion management begins well before the injury occurs. During the Pre-Season, trained staff from St. Luke's Sports Medicine provide educational seminars to athletes, parents, coaches, athletic

Computerized baseline concussion testing is used to supplement the concussion evaluation and management process during the acute stage of injury.

St. Luke's collaborates with coaches, athletic trainers, and teachers to effectively manage the concussion until the athlete can be safely returned to full physical and cognitive activity.

Cleared

CLEARANCE TO RETURN

- Return to Play (Gradual)
- Return to School
- Follow-up and monitor athlete