



LAKE TRAVIS
INDEPENDENT SCHOOL DISTRICT
Every heart. Every mind. Every day.

**High School
Guidelines for Sports Concussion Management,
Neurocognitive Testing & Return to Play Protocol**

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INTRODUCTION

A concussion is a type of traumatic brain injury, or TBI, caused by a bump, blow, or jolt to the head that can change the way your brain normally works. Concussions can also occur from a blow to the body that causes the head to move rapidly back and forth. Even a “ding,” “getting your bell rung,” or what seems to be mild bump or blow to the head can be serious. Concussions can occur in *any* sport or recreation activity. All coaches, parents, and athletes need to learn concussion signs and symptoms and what to do if a concussion occurs. Each year, U.S. emergency departments treat an estimated 135,000 sports and recreation related TBIs, including concussions, among children ages 5 to 18. Athletes who have ever had a concussion are at increased risk for another concussion. Children and teens are more likely to get a concussion and take longer to recover than adults (*source: Centers for Disease Control and Prevention*). In order to have a standard method of managing concussions to LTISD athletes, the following guidelines are intended to serve as a written protocol for concussion management.

WHAT IS A CONCUSSION?

Concussion - A concussion is a type of traumatic brain injury (TBI). Concussions are the common result of a blow to the head or body which causes the brain to move rapidly within the skull.

Concussions cause brain function to change which results in an altered mental state (either temporary or prolonged). Physiologic and/or anatomic disruptions of connections between some nerve cells in the brain occur. Symptoms include, but are not limited to, brief loss of consciousness, headache, amnesia, nausea, dizziness, confusion, blurred vision, ringing in the ears, loss of balance, moodiness, poor concentration or mentally slow, lethargy, photosensitivity, sensitivity to noise, and a change in sleeping patterns. These symptoms may be temporary or long lasting.

Also of concern is the risk of repeated concussions and second impact syndrome to young athletes. These two problems can have long lasting, and even fatal effects, on the individual. In order to have a standard method of managing concussions of LTISD athletes, the following guidelines are intended to serve as a written protocol for concussion management.



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HISTORY

The following events play a significant role leading up to the development and implementation of the LTISD concussion management and return to play protocol:

- 1) November 2008: the 3rd International Conference on Concussion in Sport convened in Zurich, Switzerland and published its *Consensus Statement on Concussion in Sport*
- 2) April, 2010: the NCAA Executive Committee updated its policy statement regarding concussions
- 3) January 2011: the National Federation of State High School Associations published *Suggested Guidelines for the Management of Concussion in Sports*.
- 4) June 2011: The Texas' Legislature's House Bill 2038, also known as Natasha's Law, was passed and signed into law. This is a law relating to prevention, treatment, and oversight of concussions affecting public school students' participation in interscholastic athletics.
- 5) Summer 2011: Texas Education Code updated *Chapter 38, Sub Chapter D* regarding concussion management of student-athletes participating in interscholastic sports in Texas.
- 6) Summer 2011: The University Interscholastic League updated its requirements for concussion management in student-athletes participating in activities under the jurisdiction of the UIL, and published *Implementation Guide NFHS Suggested Guidelines for Concussions and Chapter 38, Sub Chapter D of the Texas Education Code*

PURPOSE

Lake Travis Independent School District will continue to keep the health, safety and welfare of its student-athletes foremost. In addition, this Protocol complies with HB 2038, the UIL's concussion management protocol and TEC Section 38.153.

This *Concussion Management (CM) and Return To Play Protocol (RTP)* is designed to help the LTISD Athletic Department, treat its student-athletes who are suspected to have sustained a concussion in a safe, efficient and objective manner. By following this protocol, LTISD will be able to provide efficient treatment to keep the student-athlete's health primary and safe while also being able to assist the student-athlete to return to competition as quickly as possible following a concussion episode. In addition, this Protocol complies with the *UIL's Implementation Guide for NFHS Suggested Guidelines for Concussions* and Chapter 38, Sub Chapter D of the Texas Education Code and HB 2038.



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DESCRIPTION

According to this CM & RTP protocol:

A) LTISD Athletic Department will create and implement a Concussion Oversight Team.

“The governing body of each school district and open-enrollment charter school with students enrolled who participate in an interscholastic athletic activity shall appoint or approve a concussion oversight team. Each concussion oversight team shall establish a return-to-play protocol, based on peer reviewed scientific evidence, for a student's return to interscholastic athletics practice or competition following the force or impact believed to have caused a concussion.” (UIL Concussion Management Protocol Implementation Guide)

The members of the LTISD Concussion Oversight Team are made up of the athletic training staff, registered nurses of Lake Travis Independent School District, Dr. Michael Shane Reardon, and Holly Morris-Kuentz.

B) LTISD athletic training staff will:

- 1) Complete all UIL-required training regarding concussion management.
- 2) Educate student-athletes about concussions.
- 3) Educate the coaching staff about the LTISD CM and RTP protocol and the coaches' role within the protocol.
- 4) Facilitate mandatory baseline ImpACT™ testing to student-athletes
- 5) Facilitate mandatory ImpACT™ **Post** Injury Test to concussed athletes
- 6) Maintain documentation of the incident, evaluation, continued management and clearance of student-athletes who have suffered a concussion.
- 7) Maintain documentation of the completed UIL Concussion Management Protocol Return to Play Form. This form must be completed and signed by the appropriate people prior to a student-athlete's return to play following a concussion.
- 8) Communicate with LTISD coaches as to the medical clearance of student-athletes who have suffered concussions.

C) The coaching staff of LTISD will:

- 1) Complete all UIL-required training regarding concussions.
- 2) Educate student-athletes about concussions.
- 3) Remove a student-athlete from a practice or competition if they show any signs, symptoms, or behaviors consistent with a concussion, and refer them for evaluation by an appropriate, licensed health care professional (physician, athletic trainer, nurse practitioner, etc.).
- 4) Follow all participation restrictions that are placed on a student-athlete by an appropriate, licensed healthcare professional that has evaluated the student-athlete.



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- D) A student-athlete must be removed from a practice or competition immediately if struck with an object above the neck region during the practice or competition:
- E) A student-athlete must be removed from a practice or competition immediately if one of the following persons believes the student might have sustained a concussion during the practice or competition:
- coach
 - physician
 - licensed health care professional
 - parent, guardian or another person with legal authority to make medical decisions for the student.
- F) If a student-athlete shows any signs, symptoms or behaviors consistent with a concussion:
- 1) The student-athlete shall be immediately removed from game/practice.
 - 2) The student-athlete shall be evaluated by an appropriate, licensed health care professional as soon as it is practical to do so (physician, athletic trainer, nurse practitioner, etc.).
 - 3) Inform the student-athlete's parent or guardian about the possible concussion and give them:
 - Educational material on concussions, including instructions for monitoring the student-athlete by someone who is able to stay with them and follow the instructions.
 - Return to Play Guidelines
 - 4) The student-athlete shall not be allowed to return to participation that day regardless of how quickly the signs or symptoms of the concussion resolve, and shall be kept from activity until a physician indicates they are symptom-free and gives clearance to return to activity as described below.
 - 5) A coach of an interscholastic athletics team may not authorize a student's return to play.

EVOLUTION & FUTURE CONSIDERATIONS

This protocol as well as the issue of sports concussion management should be continually updated following established guidelines and new standards of care as they become available.



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Parental Information

What is a concussion?

A concussion is an injury to the brain. It is caused by a bump, blow, or jolt to either the head or the body that causes the brain to move rapidly within the skull. The resulting injury to the brain changes how the brain functions in a normal manner. The signs and symptoms of a concussion can show up immediately after the injury or may not appear for hours or days after the injury. Concussions can have serious long-term health effects, and even a seemingly mild injury can be serious. A major concern with any concussion is returning to play too soon. Having a second concussion before healing can take place from the initial or previous concussion can lead to serious and potentially fatal health conditions.

What are the symptoms of a concussion?

Signs and symptoms of a concussion are typically noticed right after the injury, but some might not be recognized until days after the injury. Common symptoms include: headache, dizziness, amnesia, fatigue, confusion, mood changes, depression, poor vision, sensitivity to light or noise, lethargy, poor attention or concentration, sleep disturbances, and aggression. The individual may or may not have lost consciousness.

What should be done if a concussion is suspected?

1. Immediately remove student from practice or game
2. Seek medical attention right away
3. Do not allow the student to return to play until proper medical clearance and return to play guidelines have been followed. The permission for return to play will come from the appropriate health care professional or professionals.

If you have any questions concerning concussions or the return to play policy, you may contact the athletic trainer at your school.

What should the athlete know about playing with a concussion?

Teach athletes **it's not smart to play with a concussion**. Rest is the key after a concussion. Sometimes athletes, parents, and other school or league officials wrongly believe that it shows strength and courage to play injured. Discourage others from pressuring injured athletes to play. Don't let your athlete convince you that they're "just fine."

What are the risks of returning to activity too soon after sustaining a concussion?

Prevent long-term problems. If an athlete has a concussion, their brain needs time to heal. Don't let them return to play the day of the injury and until a health care professional, experienced in evaluating for concussion, says they are symptom-free and it's OK to return to play. A repeat concussion that occurs before the brain recovers from the first—usually within a short time period (hours, days, weeks)—can slow recovery or increase the chances for long-term problems.



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Parental Information

What can happen if my child keeps on playing with a concussion?

Athletes with the signs and symptoms of concussion should be removed from play immediately. Continuing to play with the signs and symptoms of a concussion leaves the young athlete especially vulnerable to greater injury. There is an increased risk of significant damage from a concussion for a period of time after that concussion occurs, particularly if the athlete suffers another concussion before completely recovering from the first one. This can lead to prolonged recovery, or even to severe brain swelling (second impact syndrome) with devastating and even fatal consequences. It is well known that adolescent or teenage athletes will often under report symptoms of injuries. And concussions are no different. As a result, education of administrators, coaches, parents and students is the key for student-athlete's safety.

Liability Provisions

The student and the student's parent or guardian or another person with legal authority to make medical decisions for the student understands this policy does not:

1. Waive any immunity from liability of a school district or open-enrollment charter school or of district of charter school officers or employees;
2. Create any liability for a cause of action against a school district or open-enrollment charter school or against district or charter school officers or employees;
3. Waive any immunity from liability under Section 74.151, Civil Practice and Remedies Code;
4. Create any liability for a member of a concussion oversight team arising from the injury or death of a student participating in an interscholastic athletics practice of competition, based only on service on the concussion oversight team.



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Name: _____

Date of Injury: _____

Sport: _____

Date: _____

Grade/ Team: _____

Time: _____

How do you feel? You should score yourself on the following symptoms, based on how you feel now.

None: 0 Mild: 1-2 Moderate: 3-4 Severe: 5-6

1. Headache	0	1	2	3	4	5	6
2. "Pressure in head"	0	1	2	3	4	5	6
3. Neck Pain	0	1	2	3	4	5	6
4. Nausea or vomiting	0	1	2	3	4	5	6
5. Dizziness	0	1	2	3	4	5	6
6. Blurred vision	0	1	2	3	4	5	6
7. Balance problems	0	1	2	3	4	5	6
8. Sensitivity to light	0	1	2	3	4	5	6
9. Sensitivity to noise	0	1	2	3	4	5	6
10. Feeling slowed down	0	1	2	3	4	5	6
11. Feeling like "in a fog"	0	1	2	3	4	5	6
12. "Don't feel right"	0	1	2	3	4	5	6
13. Difficulty concentrating	0	1	2	3	4	5	6
14. Difficulty remembering	0	1	2	3	4	5	6
15. Fatigue or low energy	0	1	2	3	4	5	6
16. Confusion	0	1	2	3	4	5	6
17. Drowsiness	0	1	2	3	4	5	6
18. Trouble falling asleep	0	1	2	3	4	5	6
19. More emotional	0	1	2	3	4	5	6
20. Irritable	0	1	2	3	4	5	6
21. Sadness	0	1	2	3	4	5	6
22. Nervous or Anxious	0	1	2	3	4	5	6

Do symptoms get worse with physical activity? Y N

Do symptoms get worse with mental activity? Y N

Total Number of Symptoms: _____

Symptom Severity Score: _____



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Athlete Name: _____ Examiner: _____
 Date/Time of injury _____ Sport / team / school: _____
 Age: _____ Gender: **M F** Current Grade: _____ Dominant hand: **right left neither**
 How many concussions have had in the past? _____ Most recent concussion? _____
 How long was your recovery from the most recent concussion? _____

Have you ever been diagnosed with headaches or migraines?	Y	N
Do you have a learning disability, dyslexia, ADD / ADHD?	Y	N
Are you on any medications? <i>If yes, please list:</i>	Y	N
Any loss of consciousness? <i>If so how long?</i>	Y	N
Balance or motor incoordination (stumbles, slow / labored movements, etc.)?	Y	N
Disorientation or confusion (inability to respond appropriately to questions)?	Y	N
Loss of memory <i>if so, how long? / Before or After the injury?</i>	Y	N
Blank or vacant look?	Y	N
Visible facial injury in combination with any of the above:	Y	N

NOTES: Mechanism of injury ("tell me what happened")

Delayed Recall (SAC) EAT DOG RUN

Maddocks Score

What venue are we at today?	0	1
Which half is it now?	0	1
Who scored last in this match?	0	1
What team did you play last week / game?	0	1
Did your team win the last game?	0	1
Maddocks score	___ OF 5	

Cognitive Assessment (SAC)

What month is it?	0	1
What is the date today?	0	1
What is the day of the week?	0	1
What year is it?	0	1
What time is it right now? (w/i hour)	0	1
Orientation score	___ of 5	

Immediate Memory

List	Trial 1		Trial 2		Trial 3		Alternative Word List		
Elbow	0	1	0	1	0	1	Candle	Baby	Finger
Apple	0	1	0	1	0	1	Paper	Monkey	Penny
Carpet	0	1	0	1	0	1	Sugar	Perfume	Blanket
Saddle	0	1	0	1	0	1	Sandwich	Sunset	Lemon
Bubble	0	1	0	1	0	1	Wagon	Iron	Insect
Total							___ OF 15		

Concentration: Digits backward

List	Trial 1		Alternate Digit List		
4-9-3	0	1	6-2-9	5-2-6	4-1-5
3-8-1-4	0	1	3-2-7-9	1-7-9-5	4-9-6-8
6-2-9-7-1	0	1	1-5-2-8-6	3-8-5-2-7	6-1-8-4-3
7-1-8-4-6-2	0	1	5-3-9-1-4-8	8-3-1-9-6-4	7-2-4-8-5-6
<i>Total of 4</i>					

Concentration Month in reverse order

Dec – Nov – Oct - Sept – Aug – Jul – Jun – May – Apr – Mar – Feb - Jan **Y** **N**

Neck Examination

Range of motion /Tenderness /Upper and lower limb sensation& strength: Findings? _____

Balance Examination

Footwear: Shoes Barefoot Braces Tape Other: _____
 Which foot was tested (i.e. which is the non-dominant foot) **L** **R**
 Tandem Gait: Time (best of 4 trails) _____ Seconds

Double Leg Stance	Errors
Single Leg Stance	Errors
Tandem Stance	Errors

Coordination Examination

Upper limb coordination: Which arm was tested: *Left Right Both* Coordination score _____ of 1
 Findings? _____



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Lake Travis ISD has developed a protocol for managing concussions. This policy includes a multidiscipline approach involving athletic trainer clearance, physician referral and clearance, and successful completion of activity progressions related to their sport. The following is an outline of this procedure. The injured athlete must complete and successfully pass all of these tests in order to return to sport activity after having a concussion.

- I. All athletes who sustain head injuries are required to be evaluated by their primary care physician. They must have a normal physical and neurological exam prior to being permitted to progress to activity. This includes athletes who were initially referred to an emergency department.
- II. The student will be monitored daily at school by the athletic trainer and/or school nurse. His/her teachers will be notified of their injury and what to expect. Accommodations may need to be given according to physician recommendations and observations.
- III. The student must be asymptomatic at rest and exertion.
- IV. Once cleared to begin activity, the student will start a progressive step-by-step procedure outlined in the Prague statement. The progressions will advance at the rate of one step per day.
- V. Upon completion of the return to play protocol, he/she may return to their sport activity with no restrictions, with a **DOCTORS CLEARANCE**.

ImPACT **Baseline** on file: **Y N**

ImPact **Post** Injury Test clearance Date: _____

Name/Number of Parent Called: _____

Evaluating Athletic Trainer: _____ Date: _____

Last date with symptoms: _____ Concussion Checklist Completion Date: _____

Phase 0 – Written Physician Clearance - Date: _____

Name of Physician _____ **Date of Visit:** _____

Cleared to return to activities: Yes: No: Reasons: _____

Restrictions: _____

Phase 1 – Stationary Bike - Date: _____

Phase 2 – Walking and/or jogging on treadmill, field or track - Date: _____

May not continue beyond this point until asymptomatic

Phase 3 – Practice w/ No Contact & Weights _____

FB – Helmet, Shoulder Pads, Shorts, Girdle

Phase 4 – Full Athletic Practice - Date: _____

Phase 5 – Return To Play

Parent Signature _____

Doctors Signature _____

By signing this form, I (parent/guardian/ person with legal authority) grant permission and understand the risks and dangers related with returning to play too soon after a concussion. Furthermore, in the event that my son/daughter is diagnosed with a concussion, I give my consent for my son/daughter to participate in and comply with the Lake Travis ISD return to play protocol.



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