



ST. THOMAS AQUINAS

H I G H S C H O O L

Concussion Management Plan

2018-2019

Purpose:

Saint Thomas Aquinas High School’s staff is committed to providing quality health care services for all student-athletes. As such, the staff at St. Thomas Aquinas High School is proactive in the assessment and management of concussions with the intention of limiting risks of concussions associated with athletics, and the potential catastrophic and long-term complications from concussions. Assessment and management of concussive injuries, and return-to-play decisions remain some of the most difficult responsibilities facing health care professionals. Due to the nature of concussions, and their potentially serious complications, it is imperative that health care professionals taking care of athletes are able to recognize, evaluate and treat these injuries in complete and progressive fashion. This guideline has been developed to help athletic/medical professionals care for student-athletes at Saint Thomas Aquinas High School who have sustained a concussion.

Definition:

As defined in the Consensus Statement from the International Conference on Concussion in Sport (Zurich, 2008): “*Concussion is defined as a complex pathophysiological process affecting the brain, induced by traumatic biomechanical forces. Several common features that incorporate clinical, pathologic and biomechanical injury constructs that may be utilized in defining the nature of a concussive head injury include:*

1. *Concussion may be caused either by a direct blow to the head, neck or elsewhere on the body with an “impulsive” force transmitted to the head.*
2. *Concussion typically results in the rapid onset of short-lived impairment of neurologic function that resolves spontaneously.*
3. *Concussion may result in neuro-pathological changes, but the acute clinical symptoms largely reflect a functional disturbance rather than a structural injury.*
4. *Concussion results in a graded set of clinical symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive symptoms typically follows a sequential course; however, it is important to note that, in a small percentage of cases, post-concussive symptoms may be prolonged.*
5. *No abnormality on standard structural neuroimaging studies is seen in concussion.”*

Common Signs and Symptoms of Concussion:

The suspected diagnosis of concussion can include one or more of the following clinical domains. These are not the only signs and symptoms of concussion:

Sensitivity to light	Headache	Drowsiness	Balance problems/dizziness
Trouble sleeping	Nausea	Blurred vision	Sleeping more than usual
Sensitivity to noise	Vomiting	Irritability	Difficulty concentrating
Numbness/tingling	Fatigue	Sadness	Difficulty remembering
Feeling like in a “fog”			

Concussion Policies

Baseline Testing:

St. Thomas Aquinas High School utilizes the ImPACT™ concussion management system (www.impacttest.com). This testing is provided by STA at no cost to the student-athlete. All student-athletes who are participating in a contact or collision sport will be baseline tested prior to the start of their sports season. ImPACT tests are good for two years. All contact/collision sport athlete must keep an up-to-date test at all times and it may not expire during the current season of participation. Any athlete who is not required to have an ImPACT test may still participate in testing at his/her parent's request.

Any athlete participating in the following sports are required to have ImPACT testing:

- Football
- Soccer
- Field Hockey
- Volleyball
- Basketball
- Ice Hockey
- Skiing
- Wrestling
- Lacrosse
- Baseball
- Softball

Management and Return to Play Guidelines:

The management of concussions at St. Thomas Aquinas High School follows the rules and laws mandated by the State of New Hampshire, NHIAA, and the National Federation of State High School Associations.

In the event a student-athlete sustains a concussion, the following steps will be taken to ensure the highest level care possible:

1. The athlete will be removed from the game/practice.
2. The athletic trainer will administer an initial assessment utilizing the most up-to-date concussion diagnostic testing.
3. The parent/guardian will be notified.
4. The concussed athlete must see a physician as soon as possible.
 - a. It is highly recommended for the concussed athlete to see a concussion specialist (i.e. our team physician) since they have the most up to date information on concussions and regularly treat concussions. A list of the areas concussion specialists are below.
5. The athletic trainer will notify Attendance and Guidance of the concussion. A doctor's note is still required for an excused absence.
6. The guidance department will notify the athlete's teachers and will work with the concussed athlete to manage an academic plan that doesn't hinder the healing process of the concussed athlete.

With the diagnosis of a concussion, the athlete is restricted from all physical activity (sports, workouts, etc.) whether school related or not. The athlete must also do their best to limit mental activity (academic work, screen time, etc.) as all aspects of the brain must heal.

While the athlete is symptomatic, he/she must report to the AT Room for a daily symptom sheet and evaluation. This ensures the best outcome and ability to track the progress of the healing process.

Once 24 hours asymptomatic, the athlete will retake the ImPACT test to make sure their brain is back to its baseline level. If the test shows results comparable to the baseline, the athlete will then progress onto the return to play protocol. If the test shows results non-comparable to the baseline, the athlete must then continue to rest and recover and will re-test in 24-48 hours.

Concussion Specialists:

J. Andrew McMahon, DO
St. Thomas Team Physician
Atlantic Orthopedics (Portsmouth/York)
P: 603-559-8367

DJ Dormier, DO
Seacoast Orthopedics & Sports Medicine (Somersworth/Lee)
P: 603-742-2007

Kevin Heaton, DO
Access Sports Medicine (Exeter)
P: 603-775-7575

Return to Play Protocol

The State of New Hampshire, and the NHIAA mandate that all student-athletes sustaining a concussion will not be allowed to return to full participation prior to the completion of the gradual return to play protocol. This allows the concussed athlete to return safely and help prevent further damage or future issue. The protocol takes 5 days. Each step must take 24 hours and be overseen by the athletic trainer.

Day 1: light aerobic activity (speed walking, biking, swimming)

Day 2: increased aerobic activity and sport specific skills

Day 3: non-contact drills

Day 4: full practice (first day back with team)

Day 5: game ready

Concussion Return to Play Form

Before the concussed athlete can participate in a game again, a parent/guardian must sign, date and return the concussion return to play form. This will be given to the concussed athlete by the athletic trainer.

Care Instructions for Diagnosed Concussions

Your son/daughter has been diagnosed with a concussion (also known as a mild traumatic brain injury). These instructions are designed to help speed your recovery. Your careful attention to them can also prevent further injury. Before your son/daughter is allowed to return to activity they must be evaluated and cleared by a physician. It is **HIGHLY** recommended to see a concussion specialist such as our team physician Dr. McMahan.

Sometimes the signs and symptoms from a concussion do not become apparent until hours after the initial trauma. The following list includes some but not all possible signs and symptoms of a concussion:

Sensitivity to light	Headache	Drowsiness	Balance problems/dizziness
Trouble sleeping	Nausea	Blurred vision	Sleeping more than usual
Sensitivity to noise	Vomiting	Irritability	Difficulty concentrating
Numbness/tingling	Fatigue	Sadness	Difficulty remembering
Feeling like in a “fog”			

If any of the following symptoms occur, bring your child to the nearest hospital emergency room.

- Any significant increase in intensity in the signs and symptoms listed above
- Severe headache that is not alleviated by Tylenol or cool packs applied to the head
- Repetitive or persistent vomiting
- Difficulty seeing, any peculiar eye movements, or one pupil larger than the other
- Restlessness, irritability, or drastic changes in emotional control
- Convulsions/seizures
- Difficulty walking or using arms
- Dizziness/unsteady gait or confusion that gets progressively worse
- Difficulty being awakened
- Difficulty speaking or slurring of speech
- Bleeding or drainage of fluid from the nose or ears
- Any new or severe symptoms

Instructions:

- **REST** is key – get lots of rest. Physical rest and “brain” rest. Be sure to get enough sleep at night and take naps if possible
- Limit physical activity as well as activities that require a lot of thinking or concentration (homework, video games, texting). These activities can make symptoms worse
- You should not physically exert yourself (i.e. sports, lifting, running, biking) if you still have any symptoms of a concussion. Simply walking at a normal pace is okay.
- Drink lots of fluids and eat healthy. Do not drink alcohol.
- You may take two Tylenol (acetaminophen) every 6 hours as needed for headache. Nothing stronger unless authorized by a medical provider.
- Report any new or changing symptoms to your athletic trainer

Appendix #2 Abbreviated Concussion Policy

Abbreviated Concussion Policy

If a concussion is suspected, the athlete will be pulled from play and evaluated by the Athletic Trainer. No athlete will be allowed to return to play with a concussion. Any athlete who sustains a concussion has to follow the laws and protocols set by the State of New Hampshire, the NHIAA, and St. Thomas Aquinas High School. An abbreviated version of these protocols is listed below in an easy step-wise process.

1. **Diagnosis** - The Athletic Trainer will evaluate the student-athlete and determine if a concussion is present. If diagnosed, the athlete must rest both physically AND mentally as much as possible through the recovery period. **No athlete will be allowed to participate in any physical activity until cleared by the Athletic Trainer and parent permission is given.**
2. **Recovery** - The student-athlete is expected to see the Athletic Trainer daily for a re-evaluation and submission of a symptom sheet to evaluate progress. Absolutely NO physical activity as well as maximum mental rest must occur.
3. **Asymptomatic** - once 24 hours asymptomatic, the athlete will re-test the **IMPACT** test to make sure their brain is back to their baseline level. If it is not, more rest will occur. If their level is back to the baseline level, the athlete will proceed to **STEP 4**.
4. **Return to Play Protocol (RTP)** - each step must be separated with 24 hours, if at any time symptoms occur the athlete will rest and repeat the last asymptomatic stage. All stages will occur under the observation of the Athletic Trainer.
 1. Light aerobic activity. 20 minutes maximum.
 2. Increased aerobic activity and sport specific drills. 20 min. max.
 3. Non-contact skills & coordination. 20 min max.
 4. Full practice (first day with team).
 5. Game ready, given parent sign off.

It is recommended that all athletes who sustain a concussion be evaluated by a Sports Concussion Specialist (listed below). **These physicians are the most knowledgeable in the diagnosis and treatment of concussions and work very closely with me to make sure the student-athlete gets back as soon as possible without complications.** Please let me know who/if you will be seeing one of the following. If you would like to see Dr. McMahon, I will contact him directly and his office will then contact you to set up an appointment.

Dr. McMahon - Team Physician
Atlantic Orthopedics
Portsmouth, NH/York, ME
I will contact directly.

Dr. Cormier
Seacoast Orthopedics and Sports Medicine
Somersworth, NH/Lee, NH
603-742-2007

Ashley Leighton, ATC
Athletic Trainer
aleighton@stalux.org
603-609-1429

Ryan Brown
Athletic Director
rbrown@stalux.org
603-742-3206 x3268



ST. THOMAS AQUINAS HIGH SCHOOL

Concussion – Daily Symptom Sheet

Name: _____ Date: _____

Date of Injury: _____ Daily %: _____ Score: _____

	Symptoms	None	Mild	Moderate	Severe			
Physical	Headache	0	1	2	3	4	5	6
	Nausea	0	1	2	3	4	5	6
	Vomiting	0	1	2	3	4	5	6
	Balance Problems	0	1	2	3	4	5	6
	Dizziness	0	1	2	3	4	5	6
	Visual Problems (blurred or double)	0	1	2	3	4	5	6
	Fatigue	0	1	2	3	4	5	6
	Sensitivity to light	0	1	2	3	4	5	6
	Sensitivity to noise	0	1	2	3	4	5	6
	Numbness/tingling	0	1	2	3	4	5	6
Thinking	Feeling Mentally Foggy	0	1	2	3	4	5	6
	Feeling Slowed Down	0	1	2	3	4	5	6
	Difficulty Concentrating	0	1	2	3	4	5	6
	Difficulty Remembering	0	1	2	3	4	5	6
Sleep	Drowsiness	0	1	2	3	4	5	6
	Sleeping Less than Usual	0	1	2	3	4	5	6
	Sleeping More than Usual	0	1	2	3	4	5	6
	Trouble Falling Asleep	0	1	2	3	4	5	6
Emotion	Irritability	0	1	2	3	4	5	6
	Sadness	0	1	2	3	4	5	6
	Nervous	0	1	2	3	4	5	6
	Feeling more Emotional	0	1	2	3	4	5	6
	Pain other than Headache	0	1	2	3	4	5	6