

St. Francis de Sales Concussion Protocol

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CONCUSSION DEFINITION

A concussion is a type of traumatic brain injury caused by a direct blow to the head, or a blow to the body that causes a whiplash or rotational force to the head, neck, or torso causing the brain to come into contact with the skull causing chemical changes within the brain. Most concussions are described as mild traumatic brain injuries as they are not life threatening; however, they can cause long term changes. Concussions have a significant effect on younger, developing brains.

SIGNS AND SYMPTOMS

Athletes may complain of physical, cognitive, and emotional symptoms while those around them will notice different signs indicating a concussion. Below is a list of potential signs and symptoms present after head injuries.

Signs observed by those around the athlete:

1. Appears dazed or stunned
2. Answers questions slowly
3. Confused about current events
4. Unable to recall events prior to injury or immediately after the injury
5. Repeats themselves
6. Changes in behavior or personality (significant mood swings)
7. A loss of consciousness (briefly)

*A loss of consciousness only occurs in around 10% of all diagnosed concussions.

Symptoms reported by the athlete:

Physical:

1. Headache or “pressure” in head
2. Nausea or vomiting
3. Balance problems or dizziness
4. Fatigue or feeling tired
5. Vision issues – Blurry or double vision
6. Sensitivity to light or noise
7. Numbness or tingling throughout body
8. Does not “feel right”, feels “out of it”

Cognitive

1. Difficulty thinking clearly
2. Difficulty concentrating or remembering
3. Feeling slowed down
4. Feeling sluggish, hazy, foggy, or groggy

Emotional

1. Irritable
2. Sad
3. Nervous
4. More emotional than usual

SECONDARY INJURY

Post-concussion Syndrome

Most concussions resolve within 7-10 days; however, some can last for weeks, months, even years. Post-concussion syndrome is defined as signs and symptoms of a concussion that persist for weeks or months after the incident. Symptoms can be subjective or objective and are often non-specific making diagnosis difficult. Common symptoms of a concussion are commonly reported. No causes have been proven or accepted regarding the onset of post-concussion syndrome. The management of post-concussion syndrome is a long and slow process requiring care from a team of providers who work with concussions on a regular basis.

Second Impact Syndrome (SIS)

Most research articles define second impact syndrome as a syndrome requiring catastrophic brain injury in a person who suffers from a head trauma while still recovering from the effects of a recent concussion. This syndrome is best prevented when the proper protocols are taken to ensure the athlete fully recovers from a concussion before returning to any athletic activity.

Chronic Traumatic Encephalopathy (CTE)

CTE is a neurodegenerative disease associated with repetitive brain trauma and characterized pathologically by the accumulation of tau protein in specific areas of the brain. CTE is not a continuation of a post-concussion syndrome or symptoms from an acute concussion, but rather develops decades after exposure. Not all athletes diagnosed with CTE postmortem reported concussions during play, resulting in the current research question of if sub-concussive blows contribute to the development of CTE.

Chronic Neurocognitive Impairment (CNI)

CNI after a head injury can present in post-concussive syndrome, but can also occur years after a symptom free interval. CNI symptoms and behaviors can be demonstrated by a neuropsychological testing. Some studies have identified an association between prior concussions and chronic cognitive dysfunction, but others have found no association.

DISQUALIFICATION FROM SPORTS

There are currently no evidence-based guidelines for disqualifying or retiring an athlete from returning to sports after a concussion or multiple concussions. Several researchers have advised a clinician to consider disqualification if the following are present:

- Structural abnormality on neuroimaging
- Multiple lifetime concussions
- Persistent diminished academic or workplace performance
- Persistent post-concussive symptoms
- Prolonged recovery courses
- Perceived reduced threshold of sustaining recurrent concussions

If any of the above are noticed by the concussion management team or others, the athlete will be referred for further evaluation by a physician who works with a concussion on a daily basis. St. Francis de Sales will follow the recommendations of the physician regarding retiring an athlete from athletic participation.

CONCUSSION INJURY PREVENTION TOOLS

All sports-related concussions cannot be prevented, but several efforts can be made to reduce the incidence and severity.

1) Strict sport rule enforcement

All sports have rules for safe conduct throughout the play of each game. It is the responsibility of the coaches and officials to strictly enforce those rules to reinforce the importance of clean play. Coaches should enforce these rules to all team members and stress the importance of teammates holding each other accountable regarding clean play. Some rules have been added into games to further reduce injury potential such as banning spearing in football, no checking from behind or head contact in hockey, limiting elbow to head contact in soccer, and extended penalty time for illegal checking to the head in lacrosse.

2) Teaching proper techniques

Teaching proper contact techniques such as tackling, checking, and heading are extremely important to reduce the incidence of concussion. Our coaches for each sport will teach proper contact techniques for several days at the beginning of the season in controlled settings. After proper form has been accomplished by the athletes, contact incidences will slowly be introduced into controlled settings and then into live settings. For football, our coaches teach the rugby style tackle which requires athletes to keep their head up, place it to the outside of the opponent's body and wrap up their legs using their arms. In hockey, our coaches teach the athlete to keep their head up and to not aim for another athlete's head while making contact. Our soccer coaches teach our players to meet the ball on all headers instead of waiting for the ball to make contact with their head. They also teach the athlete's to make smart decisions on all 50/50 balls in the air and to not put themselves or the other athlete in a dangerous position. All of these techniques reduce the rates of athletes putting the head down during a tackle or a check, and thus reduce the risk of injury.

3) Reducing Contact Incidences

Currently, football is the only sport that has a restriction on how much contact an athlete can have throughout the week. No other sports have restrictions regarding full contact between athletes; however, all coaches are advised to be mindful of the amount of contact an athlete undergoes each week. Below are the guidelines provided by OHSAA regarding contact incidences in football:

OHSAA Football Sport Regulations

1.17) Preseason practices: When more than one practice takes place in a day, full contact is permitted only during one of the practice sessions. With the importance of recovery time to help minimize concussion risks, consideration should also be given to the timing of full contact during the next days (i.e. if full contact occurs during session 2 of two-a-days, there should be non-full contact in session 1 of two-a-days the following day).

1.18) In Season Practice

1.18.1) Consider limiting full contact on consecutive days

1.18.2) A student-athlete is limited to 30 minutes of full contact in practice per day

1.18.3) A student athlete is limited to 60 minutes of full contact in practice per week

1.18.4) A student-athlete can be involved in full contact in a maximum of two practices in a seven-day span.

4) Protective equipment

Helmets have been proven to reduce the number of scalp lacerations, skull fractures, and intracranial bleeds sustained during head contact injuries. However, there is no current research that states helmets or headgear prevent concussions. There is some research that suggests helmets can reduce biomechanical forces which could possibly reduce concussion severity. All helmets in our programs (football, hockey, lacrosse) are fitted by a certified coach to fit the individual athlete.

Mouth guards have been proven to prevent peri-oral and dental injuries, but there is little research to show mouthguards reduce the rate of concussions.

5) Strengthening techniques

Research has suggested that neck strengthening could limit the forces transmitted through the head and thus decrease the impact on the athlete's brain. There have been no formal studies looking at specific neck strengthening programs and their influence on concussions. Keep in mind that the benefits of stronger neck muscles are not effective in moments where the athlete has no time to prepare for the impact.

6) Be aware of surroundings

Athletes are always advised to keep their heads up during all athletic activity. They need to constantly be aware of their surroundings including inanimate objects, other athletes, and moving objects. This is important advice for contact AND non-contact athletes as both can sustain a concussion from their environment.

OHIO LAWS REGARDING CONCUSSION TREATMENT AND CLEARANCE

According to the Ohio Revised Code Title XLVII Occupations – Professions, Chapter 4755: Occupational Therapists; Physical Therapists; Athletic Trainers, athletic trainers are considered licensed healthcare professionals in the state of Ohio if the following criteria are met:

1. Have satisfactorily completed as application for licensure in accordance with rules adopted by the athletic trainers section of the Ohio occupational therapy, physical therapy, and athletic trainers board under sections 4755.61 of the Revised Code;
2. Have paid the examination fee required under this section;
3. Be of good moral character;
4. Have shown, to the satisfaction of the athletic trainers sections, that the applicant has received a baccalaureate or higher degree from an institution of higher education, approved by the athletic trainers section of the board and federal regional accreditation agency and recognized by the council on postsecondary accreditation, and has satisfactorily completed the educational course work requirements established by the rules of the athletic trainers section under section 4755.61 of the Revised code;
5. In addition to educational coursework requirements, have obtained supervised clinical experience that meets the requirements established in rules adopted by the athletic trainers sections under section 4755.61 of the Revised Code;
6. Have passed an examination adopted by the athletic trainers section under division (A)(8) of section 4755.61 of the Revised code. Each applicant for licensure shall pay, at the time of application, the nonrefundable examination fee set by the athletic trainers section.

According to the Ohio Revised Code Title XLVII Occupations – Professions, Chapter 4731: Physicians; limited practitioners, physician means a person authorized to practice medicine and surgery or osteopathic medicine and surgery.

According to the Ohio Revised Code 3313.539 Concussion and School Athletics, Section E, a licensed healthcare professional can assess and clear a child with a concussion under the following guidelines:

Section E

1. If a student is removed from practice or competition under division D of this section, the coach or referee who removed the student shall not allow the student, on the same day the student is removed, to return to that practice or competition or to participate in any other practice or competition for which the coach or referee is responsible. Thereafter, the coach or referee shall not allow the student to return to that practice or competition or to participate in any other practice or competition for which the coach or referee is responsible until both of the following conditions are satisfied:

a. The student's condition is assessed by any of the following who has complied with the requirements in division (E)(4) of this section:

- i. A physician;
- ii. A licensed healthcare professional the school district board of education or governing authority of the chartered or non-chartered, nonpublic school, pursuant to

division (E)(2) of this section, authorizes to assess a student who has been removed from practice or competition under division (D) of this section;

iii. A licensed health care professional who meets the minimum education requirements established by rules adopted under section 3707.521 of the Revised Code by the professional's licensing agency.

b. The student receives written clearance that it is safe for the student to return to practice or competition from the physician or licensed health care professional who assessed the student's condition.

2. A school district board of education or governing authority of a chartered or non-chartered nonpublic school may authorize a licensed healthcare professional to make an assessment or grant a clearance for purposes of division (E)(1) of this section only if the professional is acting in accordance with one of the following, as applicable to the professional's authority to practice in this state:

- a. In consultation with a physician;
- b. Pursuant to the referral of a physician;
- c. In collaboration with a physician;
- d. Under the supervision of a physician.

3. A physician or licensed healthcare professional who makes an assessment or grants a clearance for the purposes of division (E)(1) of this section may be a volunteer.

4. Beginning one year after the effective date of this amendment, all physicians and licensed health care professionals who conduct assessments and clearances under division (E)(1) of this section must meet the minimum education requirements established by the rules adopted under section 3707.521 of the Revised Code by their respective licensing agencies.

According to the Ohio Revised Code 3707.521 Rules regarding assessment of athletes sustaining concussions or head injuries, the licensing agency is responsible for the licensing of health care professionals to be authorized to assess and clear athletes for return to practice or competition.

Laws and Rules Regulating the Practice of Athletic Training

4755-42-02 Referring practitioner.

In accordance with division (A) of section 4755.60 of the Revised Code, an athletic trainer shall practice upon the referral from the following individuals:

- A) An individual licensed under Chapter 4731 of the Revised Code to practice medicine and surgery;
- B) An individual licensed under Chapter 4731 of the Revised Code to practice osteopathic medicine and surgery;
- C) An individual licensed under Chapter 4731 of the Revised Code to practice podiatric medicine and surgery;
- D) A dentist licensed under Chapter 4715 of the Revised Code;
- E) A physical therapist licensed under Chapter 4755 of the Revised Code; or
- F) A chiropractor licensed under Chapter 4734 of the Revised Code.

4755-43-04 Education

A. The educational requirements described in divisions (C)(4) and (C)(5) of section 4755.62 of the Revised Code shall be satisfied by completion of a professional (entry-level) education program accredited by the commission on accreditation of the athletic training education (CAATE) or its successor.

4755-43-13 Youth sports concussion and head injury assessment and clearance

B. An athletic trainer may assess and clear a youth to return to practice or competition if all of the following requirements are met:

1. Pursuant sections 3313.539 and 3707.551 of the Revised Code, the assessment and clearance is done:

- a. In consultation with a physician;
- b. Pursuant to the referral of a physician;
- c. In collaboration with a physician;
- d. Under the supervision of a physician.

2. The athletic trainer has completed education and training in the detection of concussions and/or sports and recreation-related traumatic brain injuries, the clinical features of concussions and/or sports and recreation-related traumatic brain injuries, assessment techniques, and the principles of safe return to play protocols consistent with the Zurich guidelines and/or national accepted standards and guidelines consistent with the Zurich guidelines.

3. The athletic trainer maintains competency through continuing education activities in the detection of concussions and/or sports and recreation-related traumatic brain injuries, the clinical features of concussions and/or sports and recreation-related traumatic brain injuries, assessment techniques, and the principles of safe return to play protocols consistent with the Zurich guidelines and/or national accepted standards and guidelines consistent with the Zurich guidelines.

C. The athletic trainers section recommends that athletic trainers who assess and clear a youth to return to practice or competition in accordance with the rule do both of the following:

1. Ensure that a portion of the required 25 contact hours of continuing education focus on the items listed in paragraph (B)(2) and (B)(3) of this rule

2. Use the medical clearance to return to play after suspected concussion form located at <http://www.healthy.ohio.gov/vipp/concussion.aspx> (March 2015)

The OHSAA Concussion Regulations follow the Ohio Revised Code 3313.539 guidance on personnel qualified to evaluate and return an athlete to competition. It also follows the Zurich Guidelines regarding concussion care and return to play protocol.

St. Francis de Sales agrees that the school athletic trainer will assess, guide treatment protocols, and medically clear athletes who sustain a concussion. The athletic trainers will adhere to the following rules:

1. Athletic trainer holds a valid Ohio Athletic Training License.
2. Athletic trainer completed concussion education during undergraduate CAATE certified athletic training program.
3. Athletic trainers will remain up to date with the most current concussion management protocols and guidelines regarding the symptoms, further injury, evaluation, treatment, return to learn, and return to play protocol.
4. Athletic trainer is working under the supervision of a physician and gives regular updates regarding the athlete's condition.
5. Athletic trainer is in constant communication with the concussion management team regarding initial injury, evaluation, treatment plan, return to learn protocol, and return to play protocol.
6. Baseline evaluation and post injury evaluation protocols follow the most up to date regulations and recommendations as provided by the American Medical Society for Sports Medicine, the National Athletic Trainers' Association, and the most recent Consensus statement on concussion in sport (5th Conference, Berlin 2016 and 4th Conference, Zurich 2012).
7. Athletic trainers have been properly trained and certified in all baseline and post-injury tests used.
8. Athletic trainers can recognize when further specialized treatment is needed and will refer to a physician immediately.

CONCUSSION MANAGEMENT TEAM

Proper care for a concussion is managed through the concussion management team. The team is made up of the student-athlete, their parents/guardians, academic staff, medical staff, and athletic staff. This team ensures that every student-athlete who sustains a concussion is closely monitored throughout the entire treatment process.

Medical team members:

athletic trainer(s), school nurse, physician

Academic team members:

school counselors, intervention specialists, teachers, administrators

Athletic team members:

coaches, athletic director

Student team members:

student-athlete, parent(s)/guardians

The individuals on the team and their roles will be evaluated and updated prior to the beginning of every school year, or if a staffing change occurs during the year.

Athletic Trainer (Concussion Team Leader, Member of Medical and Athletic teams)

An athletic trainer(s) should be on site for athletic practices and games, unless traveling with other teams or the staff surpasses their contract hours. The athletic training staff will conduct the initial sideline evaluation of the athlete, if present. Once it is determined that the athlete is suspected of having a concussion, they will notify the parents and explain the home care program. The athletic trainer will then act as the medical lead for the duration of the athlete's concussion. They will communicate with the rest of the concussion management team regarding the athlete's treatment plan. The athlete's symptoms will be regularly monitored and communicated with the school nurse and school counselors regarding in school symptom changes or academic accommodations. The athletic training staff will be in communication with parents and coaches regarding the student-athlete's progress. Documentation will be updated on Final Forms daily.

Title	Name	Office Phone Number	Email
Athletic Trainer	Alyssa Lassey	(419)214-5471	alassey@sfsknights.org
Athletic Trainer	Nathaniel Bruss	(567)202-6230	nbruss@sfsknights.org

Team Physician

The team physician, or other higher-level medical representative, will review the school concussion policy and concussion management team prior to the start of every school year. They will follow up with the school athletic trainer to ensure they have maintained the most up to date protocols and continuing education units. They will follow the case of every athlete with a concussion, or suspected concussion, as provided by the athletic trainer and school nurse. They will ensure these protocols are being followed throughout the entire baseline, post-injury testing, and treatment process, return to learn, and return to sport protocol. If the athlete requires further medical treatment, the team physician will conduct an evaluation and refer accordingly. They will know the athletic trainer's plan and direct medical and academic accommodations when necessary.

Title	Name	Office Phone	Email
Team Provider	Dr. John Anderson, DO	(419)251-2061	
NCH Director of Sports Medicine		7640 Sylvania Ave Suite E	

School Nurse (In school Concussion Team Leader, Medical Team)

The school nurse will be the lead person of contact during the school day when the athletic trainer(s) are not present. The nurse will record the student-athlete's reported symptoms, each morning, prior to the beginning of the student's school day. Based on those results, they will contact the school counselors with a recommendation for academic accommodations. The nurse will ensure the student-athlete follows their specific accommodations and communicate any changes made with the rest of the concussion management team. They will check-in with the student-athlete before they leave school if the student leaves before the final bell and will not be able to check-in with the athletic training staff. They will again record the student's symptoms and share results with the concussion management team. Documentation will be completed on Final Forms daily.

Nurse Days	Name	Office Phone	Email:
Mon-Fri	Jen Brown	419-214-5457	jbrown@sfsknights.org

School Counselor (Academic team)

The school counselors are the primary contact regarding any academic questions throughout the Return to Learn process. They are responsible for communicating with the student-athlete's teachers regarding their concussion and any academic accommodations being made and help assess the athlete's academic accommodation needs and share them with the school intervention specialist(s). They are also responsible for developing a plan, along with the student and teacher(s), for those students who fall behind in classwork, ensuring the student can make up any missing assignments and/or tests. They will work with school administrators as necessary regarding a proper timeline for make-up work, and possible semester grade extensions.

Title	Name	Office Phone	Email
College Counselor	Annette Bockbrader	419-214-5448	nbockbrader@sfsknights.org
Guidance Counselor Grades 7 th -8 th	Abbe LaMarr	419-214-5440	alamarr@sfsknights.org
Guidance Counselor Grade 9	Ward Ensign	419-214-5453	wensign@sfsknights.org
Guidance Counselor 10 th -12 th LN A-K	Marie Gaetner	419-214-5450	mgaetner@sfsknights.org
Guidance Counselor 10 th -12 th LN L-Z	Jim Mello	419-214-5451	jmello@sfstoledo.org

School Intervention Specialist (Academic team)

The school intervention specialists are responsible for assisting the student-athlete with any academic accommodations set in place. They will receive any accommodations, and all class work requirements, needed from the school counselors. If necessary, they will share how the athlete handles the accommodations with the rest of the concussion management team.

Title	Name	Office Phone	Email
Intervention Specialist	Rebecca Achenbach		rachenbach@sfsknights.org
Intervention Specialist			

School Psychologist (Academic and Medical team)

The school psychologist will be added to the treatment plan if the student-athlete experiences symptoms involved with the anxiety/mood trajectory. To set up an appointment, the athletic training staff or school nurse must contact the student's school counselor and explain why they believe the athlete should be seen. The school counselors will then gain parental consent and arrange the appointment. The psychologist will report back to the school nurse and athletic training staff regarding the athlete's progress.

Title	Name	Office Phone	Email
School Psychologist	Kaitlyn Inniger	*Contact Guidance Counselor for Appointment	

Teachers/Administrators (Academic team)

School teachers will be informed of the injury and projected treatment plan from the school counselors. Necessary school administrators (principal and academic dean), will be included in all communication given by the school nurse and athletic training staff regarding a student-athlete's injury status. Teachers will report back to the school counselors regarding any cognitive or emotional effects they feel necessary to communicate with the concussion management team. They will also work with the school counselors and school intervention specialists regarding any academic accommodations the student may need. They will work with the student and school counselors regarding a make-up work plan, if needed. At any time, they can contact the school athletic training staff regarding the athlete's overall progress through the protocol, or any further questions they have.

Title	Name	Office Phone	Email
Principal	John Hall	419-214-54	jhall@sfsknights.org
Academic Dean	Deb Rathbun	419-214-54	drathbun@sfsknights.org

Coaches (Athletic Team)

The coach is responsible for reporting any possible mechanism of injury or signs of concussion to the athletic training staff immediately. It is not up to the coach to determine if the athlete is allowed to return to play or rule out a head injury. They will review the proper training documents to understand the severity of concussions and post-concussion syndromes. Throughout the healing process, they will communicate with the school athletic trainer(s) regarding any changes noted in the athlete's physical, cognitive, or emotional state. They will follow all protocol guidelines laid out by the athletic training staff and ask follow up questions as needed. They are to encourage proper mental health healing and not put pressure on the student-athlete to expedite their return to play process.

Athletic Director (Athletic Team)

The athletic director is responsible for overseeing the athletic department's concussion team plan, including but not limited to: equipment management, policies, and coach/athlete/parent education.

Title	Name	Office Phone	Email
Athletic Director	Jamie Kachmarik	419-214-5468	jkachmarik@sfsknights.org
Assistant Athletic Director	Nathan Gullette	419-214-5467	ngullette@sfsknights.org

Student-Athlete (Student Team Member)

Student-athlete is responsible for clearly and honestly communicating symptoms, academic difficulties, and changes in emotions. They are to carry out their assigned duties, such as symptom ratings and modified assignments, to the best of their ability.

Parent/Guardian(s) (student team member)

Parent/Guardians are responsible for monitoring their student-athlete and updating the concussion team leader regarding any changes in symptoms or condition. They are to help the student maintain compliance with any medical and/or academic recommendations given to promote recovery.

PRE-SEASON CONCUSSION EDUCATION

Prior to participation in any athletic activity, all parents and student athletes must sign all forms on Final Forms, which includes two forms regarding concussions. The first form regarding concussions is the Concussion Acknowledgement form, which requires them to read and acknowledge their understanding of the Ohio Department of Health Concussion Information Sheet for Interscholastic Athletics. The second form regarding concussions is the HITCHECK Concussion Testing Consent form, which explains the purpose to the HITCHECK Baseline testing and requires parents to give consent for their children to take the test.

Fact sheets from the ODH and CDC will be available to hand out to parents and student-athletes regarding concussion information. A fact sheet from the NATA will be posted in all contact sport locker rooms to remind athletes to come forward with symptoms felt or noticed on other athletes.

Prior to joining the coaching staff, all SFS coaches must complete the NFHS Concussion in Sport Online Training. This course highlights the impact of sport-related concussion on athletes, teaches how to recognize a suspected concussion, and provides protocols to manage suspected concussions. All coaches are reminded prior to the season that they are to report any concussion incidences or symptoms portrayed by the athlete to the athletic training immediately.

Prior to the school year, the concussion management team will share 'An Educator's Guide to Concussions in the Classroom' from Nationwide Children's Hospital with all school educators. This guide will be shared again with them when a student in their class sustains a concussion. The school nurse and athletic trainer will answer any further questions they may have regarding concussions and the follow up care.

PRE-SEASON CONCUSSION BASELINE TESTING

All contact sports at St. Francis must complete all concussion baseline testing prior to participation. Contact sports that must complete baseline testing are football (high school and junior high), soccer, water polo, basketball, hockey, wrestling, swimming, lacrosse, and baseball. There will be one baseline test utilized: HITCHECK. The baseline exam is good for **two years**, after which time they will retake their baseline test. An athlete is unable to participate in any of the contact sports listed above if they have not taken their baseline testing or it is expired. All baseline data will be reviewed by the school athletic trainer once all testing is complete.

HITCHECK

HITCHECK, is a non-invasive, smartphone-based, neurocognitive test that is set up in a "video game" type format tracking information such as immediate recall, delayed recall, reaction time, balance, coordination, concentration, and impulse control. Their baseline test will track the following information:

- Age, Grade, Gender, Handedness, Height, Weight, sport, position, level of participation

Health History:

- Learning disabilities, ADD/hyperactivity, Speech therapy, concussion history (when, how many, severity), migraines, epilepsy/seizures, substance abuse, psychiatric conditions (depression/anxiety)

Symptom Baseline:

- Feeling dizzy; loss of balance; poor coordination/clumsy; headaches; nausea; vision problems, blurring, trouble seeing
- Sensitivity to light; hearing difficulty; sensitivity to noise; numbness or tingling; change in taste and/or smell; loss or increase in appetite
- Poor concentration/easily distracted; forgetfulness; difficulty making decisions; slowed thinking, difficulty getting organized, can't finish things; fatigue; difficulty falling or staying sleep
- Anxious or tense; depressed or sad; irritability; easily overwhelmed
- While taking the baseline test, they will rank how they are feeling in that moment regarding the above symptoms according to the following ratings: none, mild, moderate, severe, very severe.

ON-FIELD EVALUATION

During the on-field evaluation, the athletic trainer(s) will assess any significant acute trauma first; consisting of airway, breathing, and circulation (ABCs). Whether the athlete is conscious or not, the athletic training staff must rule out any cervical spine injury and other severe injuries prior to moving them or removing them from the field of play. If a cervical spine injury is suspected, the athletic trainer(s) must proceed with the school emergency action plan. If a concussion is suspected, the student-athlete will be safely removed from the field of play and taken through a side-line evaluation.

SIDE-LINE EVALUATION

If a concussion is suspected, the athlete must undergo a full side-line assessment by the school athletic trainer. This sideline assessment will be based off of the SCAT evaluation questions, a neurocognitive assessment, and a post-injury HITCHCHECK test if necessary/accessible. Based on the results of the sideline assessment, the decision will be made to return the athlete to play or to hold them out. If there is ever a question if there is a concussion, the athletic trainer will follow the rule of 'when in doubt, hold them out'. If an athlete is held out due to suspicion of a concussion, they must remain under regular monitoring by a responsible adult for deteriorating physical or mental status. Below is the outline for the side-line evaluation to be conducted:

Observations for athletic trainer of athlete:

- Did the athlete lose consciousness? How long?
- Did the athlete vomit? How many times?
- Does the athlete have difficulty speaking?
- Does the athlete have difficulty ambulating?
- Does the athlete repeat themselves?

Orientation questions to be asked:

- What month is it?
- Where are we right now?
- Who are we playing?
- Are we winning or losing?
- What position are you playing?
- What happened? (focus on memory prior to injury and after)

The athlete should answer these questions on their own, without help from anyone else. They should also have immediate and clear responses.

Symptoms to be asked:

If the athlete complains of one or more symptoms belonging to the list below, they will be removed from athletic activity for the day. They will still undergo all sideline testing.

Headache, neck pain, "pressure in head", nausea, dizziness, blurred vision, light sensitivity, noise sensitivity, feeling like 'in a fog', 'don't feel right', fatigue, confused, hard to concentrate, hard to remember (SCAT5)

Cognitive questions/testing:

Months (SCAT5):

Ask athlete to say the months of the year in reverse order

Immediate Memory (SCAT 5):

AT says the following 5 words: elbow – apple – carpet – saddle – bubble

Athlete must repeat all five words back to the AT

Repeat this test 3 times, tracking how many words the athlete answers correctly each time

Delayed Memory (SCAT5):

Ask athlete to repeat immediate memory words after all other testing has been completed.

Again, the athlete should answer these questions on their own, without help from anyone else. They should also have immediate and clear responses, no hesitation or confusion.

Ortho/Neuro exam:

Neck range of motion

Flexion – Chin to their chest

Extension – Look to the sky

Lateral flexion – bilaterally, ear to shoulder, keep opposite shoulder lowered

Rotation – bilaterally, look over shoulder without turning body

12 Cranial Nerve Exam

1 – Olfactory: Close eyes and smell something

2 – Optic: How many fingers am I holding up? Perform at periphery too

3 – Oculomotor: pen light to pupil. Always approach from the side.

PEARL: pupils are equal and responsive to light

Anisocoria: unequal pupil size

4 – Trochlear: Follow finger to tip of nose

5 – Trigeminal: sensation of face. Touch their forehead, cheek, and jaw

6 – Abducens: Have eyes follow in 'H' pattern

Nystagmus: fluttering of eyes

7 – Facial: face movements such as wrinkle forehead, close eyes, smile

8 – Acoustic: close eyes, snap fingers in ear, can you hear that?

9 – Glossopharyngeal: Swallow

10 – Vagus: say 'AHH'

11 – Spinal Accessory: shrug shoulders, resist downward push

12 – Hypoglossal: stick out your tongue

Motor Exam:

A modified BESS (SCAT5) will be completed by only testing the positions on a firm surface. During the sideline exam, athletes will not be tested using the balance pad. Athlete must have fewer or equal errors during the sideline testing than they had in their baseline testing. *AT must keep in mind that baseline was performed prior to activity whereas sideline is performed immediately after activity.

*****Emergency Situations:**

Athlete will be referred to the closest emergency room **immediately** if the following scenarios occur:

- 1) Loss of consciousness of more than 2 minutes
- 2) Vomits more than once
- 3) Continues to repeat statements or questions
- 4) Continues to be unaware of self, location, injury, etc.
- 5) Shows signs of cervical/facial/skull injury
- 6) Experiences rapid and extreme mood swings

CONCUSSIONS THAT OCCUR OUTSIDE ATHLETIC EVENTS

In the event that an athlete is suspected of sustaining a concussion during school hours, they will immediately be sent to the school nurse for evaluation. The school nurse will document the mechanism of injury and the athlete's signs and symptoms. They will then contact the school athletic trainer to discuss the next steps including if the athlete can complete the school day or needs to go home. If they are able to complete the school day, the school athletic trainer will conduct a full evaluation of the athlete prior to them leaving for the day. After conducting the evaluation, if a non-athlete, the school nurse will then contact the parents with the current evaluation/treatment plan, and share the Parent Concussion Care Packet with them. If the student is an athlete, the athletic trainer will contact the parents regarding the updated treatment plan and share the Parent Concussion Care Packet. Regardless of if the student is an athlete or not, the concussion management team will be notified by the school nurse or athletic trainer regarding the student's plan of care.

In the event that an athlete sustains, or is suspected of sustaining, a concussion outside of school hours, the school athletic trainer should be contacted as soon as possible. Parents can contact the school athletic trainer directly or connect with them through the school nurse or athletic director. The athletic trainer will discuss the current treatment plan with the parents including what treatment they may have already completed, and then work with them to develop a comprehensive treatment plan. The concussion management team will be contacted immediately regarding all treatment protocols.

ACUTE POST-CONCUSSION EVALUATION/CARE PLAN

After the athlete has been removed from activity, several steps will be followed prior to sending the athlete home.

Step 1: Post activity evaluation

The athletic trainer will again go through a thorough post-concussion assessment involving the following:

- 1) Clinical interview

- Mechanism of Injury
 - History of concussion for athlete
 - History of migraines for athlete and family
 - History of learning disability or ADD/ADHD
- 2) Review of Symptoms
- Severity of symptoms
 - Location if applicable
 - What makes them worse or better?
- 3) Repeat sideline Neuro/Ortho/Cognitive testing
- Repeat months backwards
 - Immediate memory – 5 words
 - Delayed memory – repeat 5 words after all other testing
 - Neck range of motion
 - 12 Cranial nerve screening
- 4) Repeat HITCHECK test
- Only repeat test same day if athlete is more than 2 hours post activity and does not complain of severe symptoms. Decision to retest the same day is under the discretion of the school athletic trainer. Athlete must complete all baseline testing within 24-28 hours after the injury occurs.

Step 2: Education of concussion/Review of home care program

The athletic trainer will give the athlete and their parents or legal guardian the SFS Concussion Home Care Plan. They will review all aspects of the home care plan and answer any questions. The home care plan will include the following information:

- 1) Explanation of concussion
- 2) Emergency Signs
- 3) Do's of caring for a concussion
- 3) Don'ts of caring for a concussion
- 4) Review of athlete's baseline and post-injury testing
- 5) Review of return to learn process
- 6) Review of return to play process
- 7) Additional rehabilitation if needed
 - Vision therapy
 - Vestibular Therapy
 - Neck range of motion

Step 3: Contact Concussion Management Team

The athletic trainer will contact the concussion management team with the following information the day the athlete was evaluated for a concussion:

- 1) When/how the injury occurred
- 2) Baseline test results compared to post-injury test results (to be shared with physician, school nurse, and school psychologist only)

- HITCHECK (if applicable)
- Ortho/Neuro/Cognitive
- Symptoms

3) What clinical trajectories the athlete is experiencing

- Vestibular
- Ocularmotor
- Cognitive
- Post-traumatic migraine
- Cervical
- Anxiety/Mood

4) Future treatment plan

- What to expect in the following days (this will change based on when the athlete is injured)
 - Ex Friday night gets the weekend to rest, Monday re-evaluated
- State who is responsible for what treatment section
 - School nurse – morning symptom evaluation and AA review
 - School guidance counselors – AA review and teacher notification
 - School Intervention Specialist – assist student with AAs, work with teachers

SPECIAL CIRCUMSTANCES

If an athlete is pulled from a game/practice due to a suspected concussion, they are not allowed to return to that athletic event. *They may not participate in a practice or game until they have completed their baseline testing the following day.*

Football:

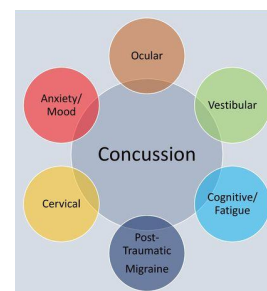
If an athlete is pulled from a Friday night football game with a suspected concussion, they may not participate in any JV or Freshman games that occur the following Saturday. They must check-in with the school athletic trainer Saturday morning and undergo all baseline testing. If their follow up tests are not within the normal limits of their baseline tests, they will begin concussion protocol immediately. If their tests are within normal limits but they continue to complain of symptoms, they will begin concussion protocol as well. Starting the protocol means they have to complete a full day of school symptom free before they can begin the return to play protocol.

LONG-TERM POST-INJURY CONCUSSION MANAGEMENT

It is important to note that every concussion is different and thus will have different treatment plans. The following information is a guideline for the treatment plan of a concussion and the daily treatment/communication that will take place.

Concussion Clinical Trajectories

Concussion is a complex injury that can involve many different symptoms, impairments, and recovery trajectories. An athlete's symptoms and post-injury exam results can be categorized into 6 Concussion Clinical Trajectories. Knowing the athlete's clinical trajectory, the concussion management team can develop a more individualized treatment plan and more targeted rehabilitation strategies. Each Clinical Trajectory reveals specific clinical and symptom presentations, assessment techniques, and treatment protocols. Athletes will undergo treatment for these trajectories while they continue to have symptoms related to the trajectory. Below is a list of the 6 clinical trajectories, their signs and symptoms and their treatment protocols.



Clinical Trajectory	Signs & Symptoms	Cause	Treatment
Cognitive/Fatigue	Difficulty Concentrating Overall Fatigue Decreased energy levels Non-specific headache Potential sleep disruption	Typically, has increased symptoms by the end of the day	Reduce cognitive and physical demands Regulate sleep, stress, diet, and mild exercise (1 short walk/day)
Vestibular	Dizziness Fogginess Nausea Feeling of being detached Anxiety Overstimulation in complex environments	Overstimulation by complex environments (school hallway, grocery store) Brought on with rapid head or body movements	Vestibular rehabilitation
Ocular Motor	Localized, frontal-based headache* Fatigue Distractibility Difficulty with vision Pressure behind eyes Trouble focusing	Extended time in front of screens Extended time reading Full day of school intensifies symptoms	Consult with neuro-optometrist and vestibular therapist Rehabilitation with vision therapy specialist Reduce strain on visual system
Anxiety/Mood	Overall increase in anxiety Ruminative thoughts Hypervigilance Feelings of being overwhelmed, sadness, or hopelessness	Perhaps brought on with sleep disturbances and vestibular issues Symptoms occur during downtime without vestibular influence	Treat vestibular issues first Begin physical exertion protocols and regular sleep, diet, hydration, and stress management

	Sleep disturbance due to inability to quiet mind		
Post-traumatic Migraine	Moderate to severe headache with nausea and light/noise sensitivity	Often exaggerated by physical activity, stress, emotional changes, anxiety, dietary triggers	Pharmacological intervention Regular sleep, diet, hydration, exercise, and stress management
Cervical	Headache - occipital Neck pain	Typically, from cervicogenic injury	Neck ROM Manual cervical and thoracic mobilization Posture education Biofeedback Soft tissue mobilization

As stated in three different trajectory treatments above, it is important for the athlete to have regular sleep patterns, diet/hydration and exercise programs, and stress management programs.

Sleep:

Systems regarding arousal, alertness, attention, and sleep are all vulnerable after sustaining a concussion. Good sleep hygiene consists of a sleep schedule (similar sleep/wake up times daily), quiet and dark environment, and the avoidance of visual stimulation from electronics. After the first few days, an athlete should avoid taking naps to help them remain on a proper sleep schedule.

Diet/Hydration:

An athlete should be drinking water daily as many concussion symptoms can be reproduced by dehydration. It is recommended that an athlete drink half their body weight in ounces every day. For example, if an athlete weighs 150 pounds, they should drink *at least* 75 oz of water every day. In regard to their diet, an athlete should be eating full, well-rounded meals for breakfast, lunch, and dinner. They should be avoiding sugar and caffeine.

Exercise program:

The current research shows that athletes should only have 24-48 hours of complete physical and cognitive rest after a concussion. After which, they can begin low level exercise and cognitive activity permitting their symptoms are not exacerbated by the activity. This activity will consist of the trajectory treatments listed above (vision therapy, vestibular therapy), as well as some low level exercises such as static/dynamic stretching, riding a stationary bike, walking on a treadmill or around a track, and low level balance exercises. Completing these exercise tasks does not mean the athlete has started the return to play protocol.

Stress management:

For most athletes, exercise is their stress management. Completing low-level exercise will help control some stress but not all. Instead, they can utilize stress management techniques such as visualization, talking with a friend/counselor/psychologist, socialization, participating in a low-level non-screen hobby (sewing, puzzles, etc.), playing with a family pet, or learning time management.

Daily Communication with Concussion Management Team (Example Path of Communication)

- A. Day of Injury: Athletic trainer will communicate with athlete and parent/care-giver regarding current plan of care. Athletic trainer will communicate with team physician, school nurse, and school psychologist regarding injury, specific symptoms, and medical concerns for the athlete. Athletic trainer will begin email chain to all concussion management team members (principal, academic dean, school nurse, specific guidance counselor, and intervention specialists)
- B. Normal School Day: Based on how the athlete is doing the previous day, the athletic trainer will set restrictions regarding the amount of mental work an athlete can handle (full day of class, partial day of class, day in the SAC, etc.). Athletic trainer will share these guidelines with the concussion management team. Student will see the school nurse before they attend any classes to go through a symptom checklist. School nurse will review the symptoms and share any academic accommodations needed for the day with the guidance counselor. The guidance counselor will share all schedule changes and accommodations needed with the teachers and the intervention specialists. Student will check in with the school nurse or the athletic trainer at the end of the day to complete another symptom checklist and review of their day.
- C. Overall guidelines: Athletic trainer will act as the medical lead for the duration of the athlete's concussion. They will give guidance and recommendations progressing through the return to learn phases, such as how much mental stimulus (ex. homework, class, etc.) the student-athlete can handle throughout the day. The School Nurse, as part of the medical team, is the main person of contact during the school day. They are responsible for deciding what work the student-athlete can handle and what work needs to be postponed, coinciding with daily symptoms scores. The Guidance Counselor is responsible for all schedule changes and accommodations needed with the teachers and the intervention specialists. They are responsible for working with the students, their teachers and the academic dean if needed, regarding all make-up work and extensions as needed. The concussion management team actively works together to help the student-athlete progress back to the classroom.

Athlete Concussion Evaluation

Symptom Check-in

Athlete will complete a symptom check-in prior to and after every school day with the school nurse. If they were not present at school, the athlete will complete this check-in with their parent or guardian who will then share it with the school athletic trainer.

HITCHECK Test

If the athlete did not take their HITCHCHECK Post-Injury Test 1 the first day they were injured, they must take it within the first 24-28 hours of the injury. After that, the test administration will be under the discretion of the school athletic trainer as each case is different.

VOMS/BESS/ORTHO/NEURO

This testing will be completed once per week, or under the discretion of the athletic trainer, until the athlete becomes asymptomatic. All testing will be completed in a quiet area with minimal distractions.

Clinical Trajectories

Each time after an athlete has a symptom check-in or post-injury examination, the athletic trainer and school nurse will re-evaluate which clinical trajectories the athlete is experiencing. The care plan will be adjusted to the new clinical trajectories.

RETURN TO LEARN

The Return to Learn process is an integral part of our concussion rehabilitation protocol. The concussion management team members actively work with each other, teachers, the student- athlete, and their parents to help the student-athlete progress back to the classroom. Below is a template used to guide the concussion management team to ensure an athlete's full return to school. This is strictly a guide, each case is unique and will be treated as such depending on severity, symptoms, activities that exacerbate symptoms, and the student-athlete's progress.

The student-athlete will report to the school nurse every morning to document their symptoms. The nurse will then report those symptoms to the school counselors and suggest any accommodations. The school counselor will then work with the intervention specialists and teachers to ensure those accommodations are communicated. After school, the student-athlete will check-in with the athletic training staff.

Stage	Description	Activity level	Criteria to move to next stage
0	No return, at Home	Day 1: maintain low-energy cognitive and physical activity. No prolonged concentration Cognitive readiness challenge: as symptoms improve, try reading or math challenge tasks for 10-30 minutes; assess for symptom increase	To move to stage 1: 1) Student can sustain concentration for 30 min before significant symptom exacerbation, AND 2) symptoms reduce or disappear with cognitive rest breaks
1	Return to school, Partial Day (1-3 hours)	Attend 1-3 classes, with interspersed rest breaks Minimal expectations for productivity. No tests of homework	To move to stage 2: Student symptom status improving, able to tolerate 4-5 hours of activity with 2-3 cognitive rest breaks built into school day

2	Return to Full day, maximal supports (maximal supports required throughout the day)	Attend most classes with 2-3 rest breaks (20-30 min) No tests. Minimal Homework (<60min) Minimal-moderate expectations for productivity	To move to stage 3: Number and severity of symptoms improving Needs only 1-2 cognitive rest breaks built into school day
3	At school Full day, moderate supports (moderate supports provided in response to symptoms during day)	Attend all classes with 1-2 rest breaks (20-30 min) Begin quizzes. Moderate Homework (60-90 min) Moderate expectations for productivity Design schedule for make-up work	To move to stage 4: Continued symptom improvement Needs no more than 1 cognitive rest break per day
4	Return to full day, Minimal supports (Monitoring final recovery)	Attend all classes with 0-1 rest breaks (20-30 min) Begin modified tests (break, extra time) Homework (90+ min) Moderate-maximum expectations for productivity	To move to stage 5: No active symptoms No exertional effects across the full school day
5	Full Return, No Supports needed	Full class schedule, no rest breaks Max expectation for productivity Begin to address make-up work	N/A

The emphasis on the return to learn is to allow the student-athlete to participate in the classroom without worsening their symptoms. As the student's symptoms improve, the school counselors/teachers will gradually increase demands by increasing the amount of work given, the length of time spent on the work, or the level of difficulty in course work. If their symptoms do not worsen, demands will gradually increase. If their symptoms worsen, the activity will be discontinued, symptoms will be communicated with the AT staff and nurse if needed to help determine treatment plan moving forward.

Below is a list of in-class accommodations that can be given to athletes experiencing specific symptoms:

Symptom	Academic Accommodations
Headache	Frequent breaks Reduce exposure to aggravators Rest in nurse's office
Dizziness	Allow student to put head down Early dismissal between classes to avoid crowded halls Eat lunch in classroom or nurse's office
Visual symptoms	Reduce exposure to computers/videos/phone Reduce brightness on screens Allow hat or sunglasses Audiotapes for books
Light Sensitivity	Move away from windows

	Dim lights/draw shades Allow hat or sunglasses
Noise sensitivity	Remove from loud environments Reduce classroom noise Avoid headphones and loud music
Difficulty concentrating	Avoid testing or major projects Extra time on assignments Shorten task duration Give breaks between tasks Consider giving class notes, or having a note-taker
Mentally Foggy	Give breaks between tasks Simplify tasks
Difficulty paying attention	Have student sit in front of room Work in a quiet room
Difficulty remembering	Provide class notes Provide memory aids Use alternative testing methods
Difficulty staying organized	Use agenda/planner for schedule and due dates Check comprehension of instruction Use "to-do" lists and checklists
Anxiety	Reassurance of progress Workload reduction Alternate forms of testing
Depression	Time built in for socialization
More emotional	Have signal with teacher to leave/rest Allow student to leave from class Meet with school psychologist
Fatigue	Strategic Rest Schedule adjustments
Sleep disturbance	Allow for late start or shortened day Allow rest breaks

Teacher/Counselor Template for Classroom accommodations:

Allow breaks if symptoms increase during the class period	<i>Student needs to report to nurse if significant increase in symptoms is reported or onset of new symptoms</i>	
Limit computer usage/screen time		
Minimize continuous reading/note taking	<i>For every 15-20 minutes of mental stimulus, student should take a 5-10 minute break</i>	
Postpone tests/quizzes/exams ~ 2-3 days		

ONE test per day when student begins taking tests/quizzes/exams	<i>Can be modified if symptoms are under control/the student feels comfortable and prepared to completed multiple during the day</i>	
Avoid the cafeteria during lunch period	<i>Student should be excused to eat lunch either in the counseling office or the nurses office</i>	
No gym class participation until RTP is completed		
No pep rallies if symptomatic		

Timeline for full return to the classroom/school work is case to case based, some students may recover quicker than others and/or not need the full accommodations for more than a day or two.

RETURN TO PLAY PROTOCOL

Prior to beginning the return to play protocol, the student-athlete must meet the following criteria:

- 1) Student- athlete has been asymptomatic for 24 hours with no increase in symptom score throughout the school day.
- 2) Student- athlete has completed a full day of school with no breaks or academic accommodations.
- 3) Student- athlete has a plan in place with school counselors, teachers, and academic dean regarding all school make-up work. Plan must be signed off on by the counselor and teachers.

Prior to completion of RTP protocol, all ImPACT and neurologic testing has returned to baseline levels or within normal limits of baseline, this *does not* need to be completed before beginning phase one of the RTP. Testing given by athletic training staff.

Once the above criteria is met, the student-athlete will begin the graduated return protocol. During this protocol, the athlete will complete each phase under the care of the athletic training staff, ***must remain symptom free, and the next phase cannot be attempted within 24 hours of the previous phase.*** If the student-athlete does not experience an onset or increase of symptoms with physical activity, they will progress to the next phase in the protocol. If the athlete *does experience symptoms*, the athletic training staff will ***re-evaluate and the student-athlete will be required to achieve 24 hours of no onset or increase in symptoms, then complete the previous phase again.*** Once an athlete has completed each phase of the return to play protocol, they will be cleared for full athletic participation.

Below is an example of the goals in each phase of the graduated return to play strategy:

Phase	Goal	Activity	Goal for each phase
1	Light Aerobic Activity	Jogging or stationary cycling at a moderate pace; NO resistance training	Increase Heart Rate
2	Sport-Specific Non-Contact Activity	Running/skating drilling; NO head impact activities	Added Movement to Increased HR
3	Non-Contact Practice	Sport specific drills; can begin resistance training	Activity with coordination and proprioceptive concentration
4	Full Contact Practice	Full contact practice without restrictions	Restore confidence and assess functional readiness to return to sport
5	Full Participation Clearance	Cleared for full, unrestricted participation ** CANNOT BE A COMPETITION/GAME DAY	

Below are Return to Play Guidelines for each sport:

Football		
Step	Goal	Example Activities
1	Light aerobic activity	Stationary Bike Stationary Stretching No resistance training Stationary ball handling
2	Sport-specific non-contact	Individual stationary bike Sprints (5 x 20yds) Body weight circuit (push-ups, sit-ups, jumping jacks,) Position specific non-contact drills (no collision or head impacts)
3	Non-contact practice	No live play Team Dynamic warm-up Resistance training Sprints Plyometric circuit Position specific non-contact drills (sled and dummy)
4	Full contact practice	Full practice without restrictions
5	Cleared for full Participation	**Cannot be cleared on a game or competition day

Soccer

Step	Goal	Example Activities
1	Light aerobic activity	Stationary Bike Stationary Stretching No resistance training Stationary ball touches
2	Sport-specific non-contact	Interval stationary bike Sprints GK: within 18 yd box, agility, cone drills Field: width of field, agility ladder, cone drills 15 min – sport specific non-contact drills GK: modified warm-up, ball distribution (no diving, no gloves) Field: distance run, passing, volleys. Long balls (kicking only)
3	Non-contact practice	No live play 30 min sport-specific non-contact drills GK: warm-up, defend controlled shots on goal, no collision, gradual increase into diving (from sitting – kneeling – standing) Field: ball drills, shots on goal, possession (red vest), gradual increase in headers
4	Full contact practice	Full practice without restrictions
5	Cleared for full Participation	**Cannot be cleared on a game or competition day

Water Polo		
Step	Goal	Example Activities
1	Light aerobic activity	20 min kicking with board Land-based bike or elliptical (staying under 65% of max speed) Low level body weight circuit Stationary Ball handling
2	Sport-specific non-contact	30 min limited head movement, All four strokes, open turns Sprints GK: Tread water, explode up Field: length of pool, with and without ball 15 min – sport specific non-contact drills GK: modified warm-up, ball distribution (no shots on goal) Field: distance swim, passing in air, no receiving passes in air
3	Non-contact practice	30 min: more complex interval training, All four strokes, open turns No live play 30 min sport-specific non-contact drills GK: warm-up, defend controlled shots on goal, no collision, gradual increase into diving for shots Field: ball handling drills, passing in air, shots on goal, possession (red cap)
4	Full contact practice	Full practice without restrictions
5	Cleared for full Participation	**Cannot be cleared on a game or competition day

Basketball		
Step	Goal	Example Activities
1	Light aerobic activity	Stationary bike Stationary stretching No resistance training
2	Sport-specific non-contact	Individual dynamic warm-up Interval stationary bike or treadmill run Sprints (5 x 20yds) Body weight circuit (push-ups, sit-ups, jumping jacks,) Ball handling, shooting (no rebounding)
3	Non-contact practice	No live play Resistance training Team dynamic warm-up Position drills 30-min practice: shell drill, ball handling, shooting drills with team
4	Full contact practice	Full participation in practice
5	Cleared for full Participation	**Cannot be cleared on a game or competition day

Wrestling		
Step	Goal	Example Activities
1	Light aerobic activity	Stationary bike Stationary stretching No resistance training
2	Sport-specific non-contact	Individual dynamic warm-up Interval stationary bike or treadmill run Sprints (5 x 20yds) Body weight circuit (push-ups, sit-ups, jumping jacks,) No Live Play
3	Non-contact practice	No live wrestling Resistance training Team dynamic warm-up Drills – no finishing, moves from top and bottom at 50% with coach/controlled teammate
4	Full contact practice	Full participation in practice
5	Cleared for full Participation	**Cannot be cleared on a game or competition day

Hockey		
Step	Goal	Example Activities
1	Light aerobic activity	Stationary Bike No resistance training Stationary Stick/puck handling Put on skates – easy 5 laps around ice, no stick or puck
2	Sport-specific non-contact	Interval stationary bike Body weight circuit (push-ups, sit-ups, jumping jacks, etc.) Sprints GK: within goal perimeter/half ice, agility/mobility Field: width of ice, cone drills 15 min – sport specific non-contact drills GK: modified warm-up, puck distribution (no shots on goal) Field: distance skate, stationary passing
3	Non-contact practice	No live play 30 min sport-specific non-contact drills GK: warm-up, defend controlled shots on goal, no collision, gradual increase into diving Field: puck drills, shots on goal, possession (red vest)
4	Full contact practice	Full practice without restrictions
5	Cleared for full Participation	**Cannot be cleared on a game or competition day

Lacrosse		
Step	Goal	Example Activities
1	Light aerobic activity	Stationary Bike No resistance training Stationary Stick handling
2	Sport-specific non-contact	Interval stationary bike Body weight circuit (push-ups, sit-ups, jumping jacks, etc.) Sprints GK: within goal perimeter, agility, cone drills Field: width of field, agility ladder, cone drills 15 min – sport specific non-contact drills GK: modified warm-up, ball distribution (no shots on goal) Field: distance run, passing in air, receiving ball on ground
3	Non-contact practice	No live play 30 min sport-specific non-contact drills GK: warm-up, defend controlled shots on goal, no collision, gradual increase into diving Field: ball handling drills, passing in air, shots on goal, possession (red vest)
4	Full contact practice	Full practice without restrictions
5	Cleared for full Participation	**Cannot be cleared on a game or competition day

Baseball

Step	Goal	Example Activities
1	Light aerobic activity	Stationary Bike No resistance training Stationary Stick handling
2	Sport-specific non-contact	Interval stationary bike Body weight circuit (push-ups, sit-ups, jumping jacks, etc.) Base Running Throwing Warm-up, 20 yard catches max Ground Balls, No fly balls Batting off a tee
3	Non-contact practice	No live play Team Warm-up (dynamic and throwing) Base Running (no live) Throwing (outfield and infield) Ground balls and fly balls Batting with slow pitch
4	Full contact practice	Full practice without restrictions
5	Cleared for full Participation	**Cannot be cleared on a game or competition day

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