Pope Francis Preparatory School Athletics Concussion Policy and Procedures

Table of Contents

Section		Page
Section I	Introduction	2
Section II	Mechanism of Injury and Definition of Concussion	2
Section III	Recognition of a Concussion	2
Section IV	Overview of PFPS Management and Referral Guidelines	3
Section V	Sway Medical Concussion Testing	4
Section VI	Academic Re-entry Plan and Gradual Return to Play Protocol	5
Section VII	Parent Responsibility	6
Section VIII	Student-Athlete Responsibility	7
Section IX	Coach Responsibility	7
Section X	Athletic Trainer Responsibility	8
Section XI	Athletic Director Responsibility	9
Section XII	School Nurse Responsibility	10
Section XIII	School Responsibility	11
Section XIV	Documentation and Record Maintenance	11
Section XV	Post-Concussion Syndrome	11
Section XVI	Second Impact Syndrome	12
Section XVII	Concussion Education	12

Section I - Introduction

In accordance with 105 CMR 201.000, "Head Injuries and Concussions in Extracurricular Athletic Activities" and in conjunction with the Massachusetts Interscholastic Athletic Association (MIAA) recommendations, Pope Francis Preparatory School aims to properly assess and treat student-athletes with suspected concussions. PFPS has established this protocol to provide education about sports-related concussions for athletic department staff, school personnel, parents, and athletes. This protocol outlines procedures for staff to follow in order to properly manage sports-related concussions.

This policy will be reviewed annually by the Pope Francis Preparatory School Athletic Department and Nursing staff. This policy should be reviewed on a yearly basis with all athletic and coaching staff to discuss roles and responsibilities for the management of sports-related concussions. This policy is applicable to all Pope Francis Preparatory School Extracurricular Athletic Activities.

Section II - Mechanism of Injury and Definition of Concussion

A concussion can be caused by a direct blow to the head or by an indirect trauma. This means any force that causes the brain to bounce or rotate within the skull, and may or may not include loss of consciousness.

A concussion can be defined as a complex disturbance in brain function, due to indirect or direct trauma to the head, related to neurometabolic dysfunction, rather than structural. The sudden force can result in brain cells being stretched and damaged, creating chemical changes in the brain. Concussions can be difficult to diagnose since the injury cannot be seen.

Section III - Recognition of Concussion

Common signs and symptoms of sports-related concussion:
Signs (observed by others):

- ❑ Athlete appears dazed or stunned
- ❑ Confusion or forgetfulness (about plays, assignment, etc.)
- ❑ Unsure about game, score, opponent
- ❑ Moves clumsily, balance problems
- ❑ Change in personality or demeanor
- ❑ Responds slowly to questions
- ❑ Forgets events prior to or after hit
- ❑ Loss of consciousness (any duration)

Symptoms (reported by athlete):

- ❏ Headache
- ❏ Dizziness
- ❏ Fatigue
- ❏ Nausea or vomiting
- ❏ Double or blurred vision
- ❏ Sensitivity to light
- ❏ Sensitivity to noise
- ❏ Feels sluggish
- ❏ Feels "foggy"
- ❏ Difficulty concentrating
- ❏ Difficulty remembering

These signs and symptoms are indicative of probable concussion. Other causes for these symptoms should also be considered and ruled out.

Section IV - Overview of PFPS Management and Referral Guidelines

When a student-athlete loses consciousness for any reason, the Athletic Trainer will activate the PFPS Emergency Action Plan. If the Athletic Trainer is unavailable, the coach should call emergency medical services (EMS) right away. They should continue to monitor the student-athlete's airway, breathing, and circulation (ABC's). The student-athlete should not be moved until trained medical assistance arrives.

Any student-athlete who is removed from practice or competition and begins to develop signs and symptoms of a worsening brain injury should be transported to the hospital immediately by ambulance. **These worsening signs and symptoms requiring immediate transport include:**

- ❏ Deterioration of neurological function
- ❏ Decreasing level of consciousness
- ❏ Amnesia lasting longer than 15 minutes
- ❏ Decrease or irregularity in respirations
- ❏ Decrease or irregularity in pulse
- ❏ Unequal, dilated, or unreactive pupils
- ❏ Increase in blood pressure
- ❏ Any signs or symptoms of associated injuries, spine or skull fracture, or bleeding
- ❏ Mental status changes: lethargy, difficulty maintaining arousal, confusion, agitation
- ❏ Vomiting or worsening headache
- ❏ Seizure activity
- ❏ Cranial nerve deficits

A student-athlete who is symptomatic but stable may be transported by their parents. The parents should be advised to contact the student primary care physician, or seek care at the nearest emergency department.

Any athlete who sustains a head injury or suspected concussion during practice or competition, or exhibits signs and symptoms of a concussion, shall be removed from practice or competition immediately and may not return to practice or competition that day.

In order to return to the extracurricular athletic activity, the athlete must provide medical clearance and authorization to return to play as specified in the PFPS Concussion Policy and 105 CMR 201.011.

Section V - Sway Medical Concussion Testing

Sway is research-based software used to evaluate cognitive recovery following a concussion. The test evaluates multiple aspects of neurocognitive function including balance, inspection time, reaction time, impulse control, and post-concussion symptoms. This test is completed on a mobile device and uses its sensors to gather more objective measures.

All student-athletes at Pope Francis Preparatory School will complete the Sway Concussion Baseline Test prior to participation in high school athletics. They will be re-tested every 2 years. (Appendix A)

Following a concussion, the student-athlete will take a Post-Injury Sway Test, 48 hours after being asymptomatic. The student-athlete's post-injury test will be compared to their baseline test. The athlete must be within 5% of baseline for every section and cleared by a physician in order to begin the Gradual Return to Play Protocol.

If the student-athlete does not pass the first Post-Injury test the Athletic Trainer and School Nurse will interpret the results and determine when the athlete should take a second Post-Injury test.

The Sway concussion test will be utilized after a sports-related concussion to aid in the safe return to full participation for our student-athletes. The Sway concussion test is one component of the return to play protocol and will not be used as the sole criteria for clearance.

Section VI - Academic Re-entry Plan and Gradual Return to Play Protocol

Each student-athlete who is diagnosed with a concussion shall have an individualized, gradual re-entry plan for both academics and extracurricular athletics. The gradual academic re-entry plan shall be developed by the Guidance Counselors, in collaboration with the teachers, School Nurse, Athletic Trainer, parent/guardian, and student's physician. The academic re-entry plan should include:

- ❑ Cognitive rest as appropriate
- ❑ Graduated return to classroom studies as appropriate including accommodations
- ❑ Estimated time intervals for resumption of studies
- ❑ Frequency of assessments by the School Nurse and Athletic Trainer until full return to classroom activities are authorized
- ❑ A plan for communication and coordination between school personnel, parent/guardian, and student-athlete's physician who is managing the student's recovery

Information concerning a student-athlete's history of head injury and concussion, recuperation, gradual re-entry plan, and authorization to return to full academics and extracurricular athletics shall be shared with the Athletic Director, student-athlete's coach, Athletic Trainer, School Nurse, Guidance Counselors, and teachers. The student-athlete's teachers shall be provided with the signs and symptoms of a concussion. Information concerning a student-athlete's gradual re-entry plan may be shared with other school personnel on a need-to-know basis consistent with the District's obligations under federal and state law including but not limited to Massachusetts Student Records Regulations, 603 CMR 23.00, the Family Educational Rights and Privacy Act, and the Health Insurance Portability and Accountability Act.

The Gradual Return to Play Protocol consists of 5 days of exertional post-concussion tests, leading up to a return to full practice. The exertional testing will be administered by a Certified Athletic Trainer or other allied healthcare professional. The student-athlete must be asymptomatic during the exertional tests in order to move on to the next day and eventually to return to play. If symptoms do return, the student-athlete must return to the previous asymptomatic day completed. Only one exertional test can be completed in a day. Therefore, the Gradual Return to Play Protocol will take a minimum of 5 days to complete. (Appendix B)

The following requirements must be met before a student-athlete can start the Gradual Return to Play Protocol:

1. Student-athlete has been asymptomatic for at least 48 hours
2. Neurocognitive testing returns to within 5% of baseline
3. Physician clearance to begin Gradual Return to Play Protocol

An Athletic Trainer or other allied healthcare professional will administer the Gradual Return to Play Protocol and verify when it has been completed successfully.

Progression is individualized and will be determined on a case-by-case basis. Factors that may affect the rate of progression include: previous history of concussion, duration and type of symptoms, age of the athlete, and the sport in which the athlete participates.

Upon completion of the Gradual Return to Play Protocol, the Athletic Trainer will send the necessary forms to the student- athlete's physician to be completed.

The student-athlete may not participate in practice or competition until The *Post Sports-Related Head Injury Medical Clearance and Authorization Form* has been completed by a licensed physician, licensed neurophysiologist, licensed physician assistant, nurse practitioner, or other appropriately trained and licensed health care professional. (Appendix C)

The Athletic Trainer will notify coaches and the Athletic Director when the student-athlete has received final clearance to return to play.

Section VII - Parent Responsibility

1. Complete and update the *Pre-Participation Head Injury/Concussion Reporting Form for Extracurricular Activities* before every sports season. (Appendix D)
2. Complete the *Pope Francis Preparatory School Athletics Concussion Regulations and Education* form before the start of athletic participation every year. (Appendix E)
3. Complete the *Acknowledgement of Understanding of the Athletic Handbook and Pope Francis Concussion Policy, and Participation Consent* form. (Appendix F)
4. Inform the school if student-athlete experiences a concussion outside of school hours.
5. Watch for physical and emotional changes in your child that may indicate that they have a concussion or that the concussion is worsening. Report these symptoms to your physician.
6. Encourage your child to follow the concussion recovery protocol, which includes rest and limited use of electronics and screen time.
7. Request a contact person through the school Guidance Department with whom you can communicate about your child's academic needs and accommodations.

8. Recognize that your child will be excluded from extracurricular athletic participation until all forms are completed and on file with the athletic department.

Section VIII - Student-Athlete Responsibility

1. Complete and update the *Pre-Participation Head Injury/Concussion Reporting Form for Extracurricular Activities* before every sports season. (Appendix D)
2. Complete the *Pope Francis Preparatory School Athletics Concussion Regulations and Education* form before the start of athletic participation every year. (Appendix E)
3. Complete the *Acknowledgement of Understanding of the Athletic Handbook and Pope Francis Concussion Policy, and Participation Consent Form*. (Appendix F)
4. Complete the neurocognitive baseline testing (Sway) before athletic participation. This will then be completed every 2 years. (Appendix A)
5. Report all symptoms to the Athletic Trainer, Coach, and/or School Nurse.
6. Follow rest and recovery plan recommended by the physician.
7. Be honest about symptoms and ability to complete schoolwork.
8. See the School Nurse for pain management during school hours.
9. Complete the Post-Injury neurocognitive testing and Gradual Return to Play Protocol with Athletic Trainer.
10. Return to extracurricular athletic participation only when cleared by your physician and Athletic Trainer.
11. Student-athletes who do not complete and return all required training, testing, and forms will not be allowed to participate in extracurricular athletics at PFPS.

Section IX - Coach Responsibility

1. Complete the “Concussion in Sports” concussion education course offered by the National Federation of State High School Associations (NFHS) every year and provide certificate to Athletic Director or Athletic Trainer.
2. Ensure all student-athletes have completed neurocognitive baseline testing before participation.
3. Ensure all student-athletes have completed necessary forms related to concussions.

4. Remove any student-athlete from play who exhibits signs or symptoms of a concussion and refer the athlete for medical evaluation.

5. Complete a head injury form if your player suffers a head injury and the Athletic Trainer is not present at the athletic event. Share this form with the Pope Francis Preparatory School Athletic Trainer or Nurse. (Appendix G)

6. Seek assistance from host site Athletic Trainer or medical professional if at an away contest

7. If the Pope Francis Athletic Trainer is unavailable, or the athlete is injured at an away event, then the coach is responsible for notifying the athlete's parents of the injury.

8. Remind the athlete to report to the School Nurse before school starts, on the day that they return to school after the injury.

9. Follow Gradual Return to Play Guidelines; do not allow student-athletes to return to play until cleared by their physician and Athletic Trainer.

10. Refer any student-athlete with returned signs and symptoms back to the Athletic Trainer.

11. Coaches will discourage and prohibit student-athletes from engaging in any unreasonably dangerous athletic techniques that endangers the health or safety of a student-athlete.

Section X - Athletic Trainer Responsibility

1. Review new information on concussion management practices and advise the revision of guidelines accordingly.

2. Administer Baseline and Post-Injury neurocognitive testing at PFPS.

3. Ensure that all students meet the physical exam requirements consistent with 105 CMR 200.000 prior to the participation in any extracurricular athletic activity.

4. Ensure that all students participating in extracurricular athletic activities have completed and submitted their pre-participation forms to the health or athletic department.

5. Ensure that athletes are prohibited from engaging in any unreasonably dangerous athletic techniques that endangers the health or safety of a student-athlete.

6. Educate parents, student-athletes, and coaches about signs and symptoms of a concussion and the appropriate emergency actions to follow.

7. Work with the coaching staff to recognize and remove any student-athlete from activity that is suspected of sustaining a concussion.
    a. If a serious head injury or cervical spine injury has occurred, the Emergency Action Plan will be activated and the student-athlete's parent will be notified.
    b. If a serious head injury or cervical spine has been ruled out, the Athletic Trainer will monitor the athlete for any worsening signs or symptoms.
    c. Vital signs and symptoms will be documented using the *Post-Concussion Symptom Checklist*. (Appendix H). The Sport Concussion Assessment Tool 6th Edition (SCAT 6) up to 72 hours post injury or Sport Concussion Office Assessment Tool (SCOAT6) after 72 hours. (Appendix I and J)
    d. If there is a suspected concussion, the parent will be notified and the *Pope Francis Preparatory School Report of Head Injury* form will be given to the student-athlete to take to the physician.
    e. Notify the Athletic Director and School Nurse of any student-athlete believed to have sustained a head injury or who has been advised to be seen by an allied healthcare professional for a head injury.

8. Work with the school nurse to ensure daily documentation of the student-athlete's symptoms and to develop a plan for Post-Injury neurocognitive testing.

9. Interpret the results of Post-injury neurocognitive testing to determine need for retesting.

10. Supervise the student-athlete's Gradual Return to Play Protocol once cleared by the physician.

11. Communicate with the parent, coaching staff, school nurse, and administration on the status of student-athletes with head injuries.

12. Ensure helmets are approved and fit properly to help prevent head injuries.

13. Work with the School Nurse to help complete the required Massachusetts DPH Year-End Reporting Form for Schools - 105 CMR 201.000.

Section XI - Athletic Director Responsibility

1. Complete the annual educational training on concussions.

2. Work with the Athletic Trainer to provide and record all yearly educational trainings for parents, student-athletes, coaches, and volunteers.

3. Ensure all student-athletes participating in extracurricular athletics have completed

and submitted the necessary pre-participation forms as required by the school health office and athletics office.

4. Ensure all student-athletes are prohibited from engaging in any unreasonably dangerous athletic techniques that endanger the health or safety of an athlete.
5. Assist the School Nurse and Athletic Trainer in completing the required Massachusetts DPH Year-End Reporting Form for Schools - 105 CMR 201.000.

Section XII - School Nurse Responsibility

1. Complete the annual educational training on concussions.
2. Review pre-participation forms with the Athletic Trainer and follow up with parents as needed to the student's participation in extracurricular athletic activities.
3. Assist in testing all student-athletes with Baseline and Post-Injury neurocognitive testing.
4. Assist Athletic Trainer in maintaining pre-participation forms and head injury report forms
5. Assist Athletic Trainer with daily reporting of symptoms by student-athletes with a diagnosed concussion.
6. Participate in the gradual re-entry planning with the Athletic Trainer, Guidance Counselors, and PE teachers for students who have been diagnosed with a concussion to discuss any necessary academic accommodations.
7. Monitor students recovering from a concussion and collaborate with teachers and Athletic Trainer to ensure a graduated re-entry plan for return to full academics and extracurricular athletics is being followed.
8. Educate parents, students, and staff about the effects of concussions and returning to school and extracurricular athletic activities.
9. Complete the required Massachusetts DPH Year-End Reporting Form for Schools - 105 CMR 201.00.

Section XIII - School Responsibility

1. Review and revise the concussion policy per regulation or every 2 years.
2. When requested, assist in developing a plan to provide communication and educational materials to parents with limited English proficiency.
3. Help to closely observe student-athletes recovering from a concussion for Post-Concussion Syndrome and its symptoms.
4. Maintain copies of Accident Report Forms and Head Injury Report Forms.
5. Assist School Nurse and Athletic Trainer to ensure ongoing, school-wide concussion education for the prevention and treatment of concussions.

Section XIV - Documentation and Record Maintenance

The school shall maintain concussion records for a minimum of 3 years. Consistent with applicable state and federal law, records will include:

- ❏ Pre-Participation Head Injury Reporting Forms
- ❏ Concussion Regulations and Education Forms
- ❏ Acknowledgement of Understanding of the Athletic Handbook and Pope Francis Concussion Policy and Participation Consent Forms
- ❏ Report of Head Injury Forms
- ❏ Medical Clearance and Authorization Forms
- ❏ Re-entry Plans for return to full academic and extracurricular athletic activities
- ❏ Verification of completed annual training and receipt of materials

Section XV - Post-Concussion Syndrome

Post-Concussion Syndrome is an ill-defined and poorly understood condition that occurs after a concussion. Individuals who receive a concussion can have weeks to months of symptoms before neurocognitive function returns to normal. Parents and school personnel must listen to and closely observe all student-athletes for Post-Concussion Syndrome and its symptoms. Notify the School Nurse or Athletic Trainer if you suspect a student-athlete is suffering from Post-Concussion Syndrome. Student-athletes still suffering from concussion symptoms are not ready to return to play.

Symptoms of Post-Concussion Syndrome may include:

- ❏ Dizziness
- ❏ Headache with exertion
- ❏ Tinnitus (ringing in the ears)
- ❏ Fatigue
- ❏ Irritability
- ❏ Frustration
- ❏ Difficulty in coping with daily stress
- ❏ Impaired memory or concentration
- ❏ Eating and sleeping disorders
- ❏ Behavioral changes
- ❏ Alcohol intolerance
- ❏ Decreases in academic performance
- ❏ Depression
- ❏ Visual disturbances

Section XVI - Second Impact Syndrome

Second Impact Syndrome is a serious medical emergency resulting from a student-athlete returning to play and competition too soon following a concussion. The repeat injury, (even mild), while still symptomatic, can result in rapid and massive brain swelling, pressure, and bleeding. The athlete's condition will worsen rapidly, leading to loss of consciousness, coma, and respiratory failure. This condition can lead to permanent brain damage or death. The best way to handle Second Impact Syndrome is to prevent it from occurring.

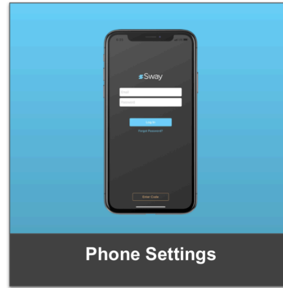
Section XVII - Concussion Education

The National Federation of State High School Associations (NFHS) offers a "Concussions in Sport" educational course which must be completed by the Athletic Director, Athletic Trainer, School Nurse, and all coaches. Teachers and Guidance Counselors can also elect to take this educational concussion course. All parents and student-athletes are also required to complete concussion education training and provide verification through the *Pope Francis Preparatory School Athletics Concussion Regulations and Education* form. (Appendix E) We also offer and provide concussion education upon request. Everyone should be aware of the potential dangers of a concussion and know how to RECOGNIZE a concussion, when to REMOVE an athlete from activity, and to REFER the athlete for medical evaluation. Whenever anyone has a doubt about a student-athlete with a head injury sit them out and have them see an appropriate healthcare provider. WHEN IN DOUBT, SIT THEM OUT.

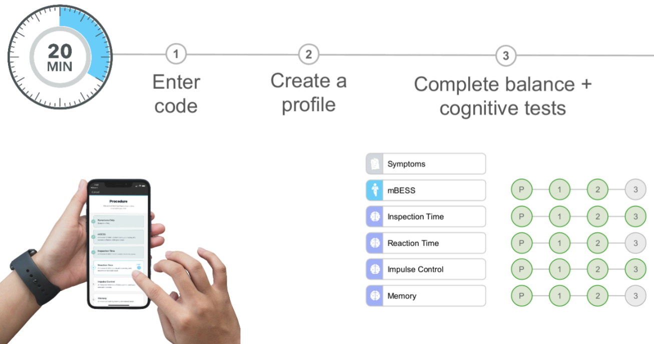
APPENDIX A

Sway Concussion Testing Instructions

Scan QR code to download the Sway Medical App



- Put your phone on ***DO NOT DISTURB***
- Close out all other apps
- Disable power mode or rise to wake
- Enable rotate screen
- Phone battery more than 10%

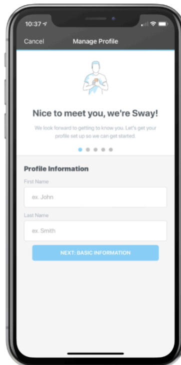


Enter the 5-digit code at the bottom of your screen

[12345]

Create a Profile

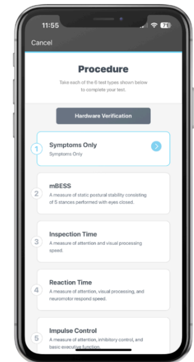
- Basic information
- Education
- Medical
- Create account? – NO



Click Hardware Verification!

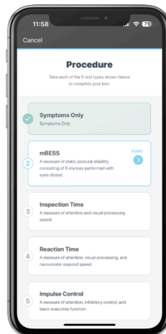
Then start the symptoms checklist

- Complete the symptoms based on how you feel TODAY



Follow the instructions on the screen!

- For each test you will complete a practice trial then 2-3 actual trials
- After you complete the balance test – sit down to complete the rest
- Check in with me before you leave the testing site



Once finished with the test, check in with Kayla Blair, Athletic Trainer.

APPENDIX B

Pope Francis Preparatory School Athletics
Post-Concussion Gradual Return to Play Protocol

Athlete Name: ______________________________ Sport: ___________________ Grade: ________

Test Completion Dates

___________	___________	___________	___________	___________	___________
Day 1	Day 2	Day 3	Day 4	Day 5	Day 6

The athlete above has completed the 6 day Gradual Return to Play Protocol without recurrence of concussive symptoms.

_________________________________ ___________________ _____________________

Certified Athletic Trainer Name License Number Phone Number

____ _____________________

Certified Athletic Trainer Signature Date

Gradual Return to Play Protocol

Return to play should occur in gradual steps beginning with light aerobic exercise only in order to increase your heart rate (e.g. stationary cycling); moving to increasing your heart rate with movement (e.g. running); then adding controlled contact if appropriate; and finally return to sports competition.

Pay careful attention to your symptoms and your thinking/concentration skills at each stage or activity. After completion of each step without recurrence of symptoms, you can move to the next level of activity the following day. If your symptoms return, inform your Athletic Trainer and drop back to the previous asymptomatic level after 24 hours or once asymptomatic.

Day 1: Low level of physical activity such as walking, light jogging, light stationary bike, light weightlifting (low weight, moderate reps, no bench or squats) for 10-15 minutes.

Day 2: Moderate level of physical activity with head/body movement such as moderate jogging, brief running, moderate intensity stationary bike, moderate intensity weightlifting (reduce time and/or weight from typical routine) for 20-25 minutes.

Day 3: Heavy non-contact physical activity such as sprinting, high intensity stationary biking, completing regular weightlifting routine, non-contact sport-specific drills for 25-30 minutes.

Day 4: Sport specific practice in a limited and controlled environment.

Day 5: Full contact in controlled drills or practice. Physician or medical provider should sign the medical clearance form before full contact is practiced.

Day 6: Return to competition.

APPENDIX C

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
250 Washington Street, Boston, MA 02108-4619

MAURA T. HEALEY
Governor

KIMBERLEY DRISCOLL
Lieutenant Governor

KATHLEEN E. WALSH
Secretary

ROBERT GOLDSTEIN, MD, PhD
Commissioner

Tel: 617-624-6000
www.mass.gov/dph

Post Sports-Related Head Injury Medical Clearance and Authorization Form

For students: Please have your medical care provider complete this form and return it to your Athletic Director, Athletic Trainer, or School Nurse.

Student Information

Student's name		Date of birth	Grade
Date of injury:	Other relevant diagnosis:		
Asymptomatic: Yes_____ No_____	Prior concussions (i.e., Number of concussions, approximate dates):		

Medical Provider Information

Practitioner's name:	Phone number:
Associated Hospital/Organization:	License number:
Type of Practitioner[1]: ☐ Physician ☐ Licensed Athletic Trainer ☐ Physician Assistant ☐ Nurse Practitioner ☐ Neuropsychologist	
☐ I attest that I have received clinical training in post-traumatic head injury assessment and management that is approved by the Department of Public Health[2] or have received equivalent training as part of my licensure or continuing education. Type of Training completed[3]: ☐ CDC online clinician training ☐ MDPH approved Clinical Training ☐ Other (Please describe):	
Select one of the following: ☐ I certify that the above named student is cleared to begin a gradual return to play protocol.[4] ☐ I certify that the above named student has completed the necessary stages of a gradual return to play protocol[4] and is cleared for full activity without restriction.	

Practitioner's Signature: ____ Date: _________________

Name of the physician providing consultation/coordination/supervision (if not the same as signatory):
____

June 2023

APPENDIX D

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
250 Washington Street, Boston, MA 02108-4619

MAURA T. HEALEY
Governor

KIMBERLEY DRISCOLL
Lieutenant Governor

KATHLEEN E. WALSH
Secretary

ROBERT GOLDSTEIN, MD, PhD
Commissioner

Tel: 617-624-6000
www.mass.gov/dph

Pre-Participation Head Injury/Concussion Reporting Form for Extracurricular Athletic Activities

This form should be completed by the student's parent(s) or legal guardian(s). Please submit this form to the Athletic Director, or official designated by the school, prior to the start of each season a student plans to participate in an extracurricular athletic activity.

Student Information

Student's name	Sex	Date of birth	Grade
School name	Sport(s)		
Home address	Phone number		

Has student ever experienced a traumatic head injury (a blow to the head)? Yes_____ No______ If yes, when? Dates (month/year):
Has student ever received medical attention for a head injury? Yes_____ No______ If yes, when? Dates (month/year): If yes, please describe the circumstances:
Was student diagnosed with a concussion? Yes_____ No______ If yes, when? Dates (month/year):
How long did symptoms last for the most recent concussion? (i.e., headache, difficulty concentrating, fatigue)

APPENDIX E

Pope Francis Athletics
Concussion Regulations and Education

This form should be completed by the student-athlete and his or her parent(s) or legal guardian(s). It must be submitted online at Sportsware Online prior to the start of athletic participation each year.

____

Student Name Sex DOB Grade

____

Sport Email Telephone

____

Home Address

In June 2011, the state passed new concussion regulations that require parents/guardians and student-athletes to be aware of the signs and symptoms of concussions. By checking one of the boxes below and signing this form, you attest to the fact that you have viewed these links. Concussions in sports are very serious and the Pope Francis Athletic Department, in conjunction with other school personnel, will be working hard to monitor student-athletes who suffer a head injury as a result of athletic participation. **You must have one of the boxes checked below.**

Check one:

- ❏ www.cdc.gov/headsup - There are links for parent/guardians and teen athletes
- ❏ www.nfhslearn.com/courses/61037/concussion-in-sports - You can order a free course
- ❏ www.cdc.gov/headsup/pdfs/schools/tbi_factsheets_parents-508-a.pdf

_____________________________ ___________________________ __________

Student-Athlete Name (Print) Signature Date

_____________________________ ___________________________ __________

Parent/Guardian Name (Print) Signature Date

APPENDIX F

The following must be returned to the athletic director prior to the start of athletic participation:

I have read the Athletic Handbook (found on the school website, under the Athletics Tab), and I am familiar with the MIAA, PVIAC and Pope Francis policies and procedures outlined herein. I have read the Pope Francis Concussion Policy and Return-to-Play protocol, and I understand the policy and protocol. I agree to abide by the policies and protocols as set forth here, as well as the policies, rules and procedures given in the student handbook.

Parent/Guardian: _______________________________ Date:_________________

Athlete: ____

RISK ACKNOWLEDGEMENT AND CONSENT TO PARTICIPATE

Name: ____

I wish to participate in athletics during the ____________________academic year. I understand that participating in athletics can be dangerous and that there are genuine and serious risks to anyone who engages in athletic activity. Due to the nature of sports and physical activity, I understand that the risks involve, and may include, without limitation, a full range of injuries including catastrophic injury resulting in permanent paralysis, brain injury or death.

I knowingly assume responsibility for any and all such risks and any and all such injuries. In furtherance thereof, I do voluntarily choose to participate in this sport and accept this risk as a condition of my participation.

My signature below indicates that I have read this entire document and understand it completely.

____

Date Athlete's Signature

____

Date Parent/Guardian's Signature

Authorization for Emergency Treatment

In the event that my child, aforementioned, becomes ill or requires emergency assistance, I hereby authorize any medical treatment deemed necessary and proper by medical officials in the event I am not present, and cannot be contacted.

Signature of Parent/Guardian____

Date____

Please print any relevant medical information or special instructions below.

____

____

____

____

____

APPENDIX G

The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
250 Washington Street, Boston, MA 02108-4619

MAURA T. HEALEY
Governor

KIMBERLEY DRISCOLL
Lieutenant Governor

KATHLEEN E. WALSH
Secretary

ROBERT GOLDSTEIN, MD, PhD
Commissioner

Tel: 617-624-6000
www.mass.gov/dph

Report of Head Injury During Sports Season Form

This form is to report head injuries (other than minor cuts or bruises) that occur during a sports season. It should be returned to the athletic director or staff member designated by the school and reviewed by the school nurse.

For Coaches: Please complete this form immediately after the game or practice for head injuries that result in the student being removed from play due to a possible concussion.
For Parents/Guardians: Please complete this form if your child has a head injury outside of school related extracurricular athletic activities.

Student Information

Student's name	Sex	Date of birth	Grade
School name	Sport(s)		
Home address	Phone number		

Date of injury:	Did the incident take place during an extracurricular athletic activity? Yes_____ No______
If so, where did the incident take place?	
Please describe nature and extent of injuries to student:	

For Parents/Guardians:

Did the student receive medical attention? Yes_____ No______	If yes, was a concussion diagnosed? Yes_____ No______

I hereby state that to the best of my knowledge, my answers to the above questions are complete and correct.

Please circle one: Coach or Marching Band Director Parent/Guardian

Name of person completing form (please print): ____

Signature: ____ Date: ______________________

APPENDIX H

Post-Concussion Symptom Checklist

Name:________________________ Sport:________________ Date:________________

Instructions: Please circle how much each of the following symptoms have bothered you today.

Symptoms	**None**	**Mild**		**Moderate**		**Severe**	
Headache	0	1	2	3	4	5	6
Pressure in Head	0	1	2	3	4	5	6
Nausea/Vomiting	0	1	2	3	4	5	6
Dizziness	0	1	2	3	4	5	6
Blurred Vision/Seeing Double	0	1	2	3	4	5	6
Balance Problems	0	1	2	3	4	5	6
Sensitivity to Bright Light	0	1	2	3	4	5	6
Sensitivity to Loud Noise	0	1	2	3	4	5	6
Feeling Slowed Down/In Slow Motion	0	1	2	3	4	5	6
Feel Like You're in a Fog	0	1	2	3	4	5	6
Don't Feel Right	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
Tired/Low Energy	0	1	2	3	4	5	6
Confusion	0	1	2	3	4	5	6
Sleepy/Drowsy	0	1	2	3	4	5	6
More Emotional	0	1	2	3	4	5	6
Irritable	0	1	2	3	4	5	6
Sadness	0	1	2	3	4	5	6
Nervous/Anxious	0	1	2	3	4	5	6
Trouble Sleep Last Night?	Yes				No		

APPENDIX I

Sport Concussion Assessment Tool 6 - SCAT6™

SCAT6™ Sport Concussion Assessment Tool

For Adolescents (13 years +) & Adults

Athlete Name: ______ ID Number: ______

Date of Birth: ______ Date of Examination: ______ Date of Injury: ______

Time of Injury: ______ Sex: Male ☐ Female ☐ Prefer Not To Say ☐ Other ______

Dominant Hand: Left ☐ Right ☐ Ambidextrous ☐ Sport/Team/School: ______

Current Year in School (if applicable): ______ Years of Education Completed (Total): ______

First Language: ______ Preferred Language: ______

Examiner: ______

Concussion History

How many diagnosed concussions has the athlete had in the past?: ______

When was the most recent concussion?: ______

Primary Symptoms: ______

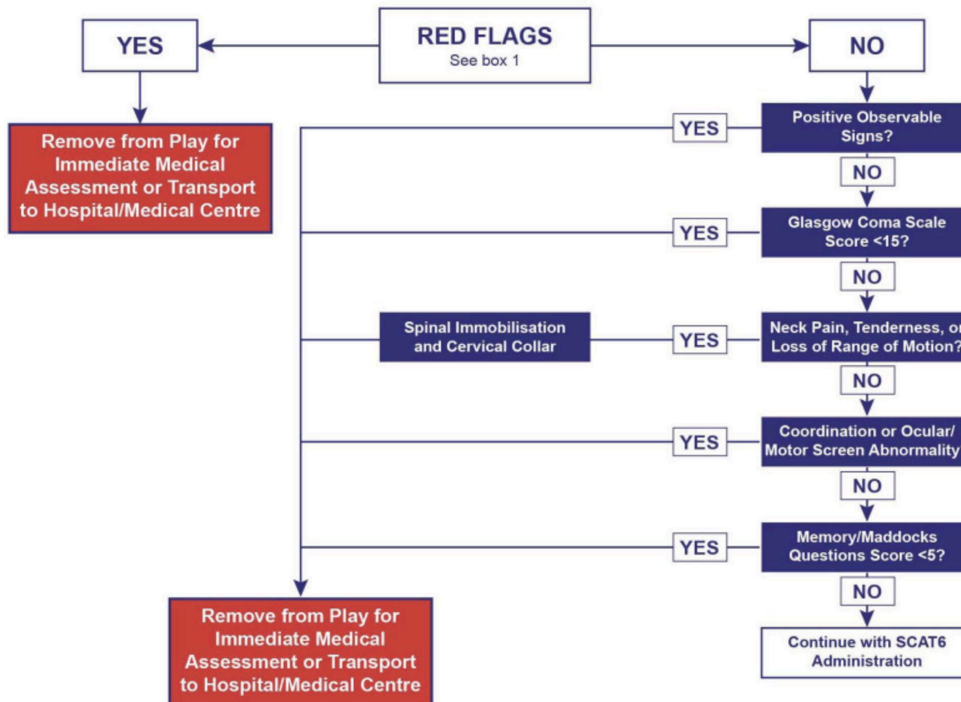
How long was the recovery (time to being cleared to play) from the most recent concussion?: ______ (Days)

Immediate Assessment/Neuro Screen (Not Required at Baseline)

The following elements should be used in the evaluation of all athletes who are suspected of having a concussion prior to proceeding to the cognitive assessment, and ideally should be completed "on-field" after the first aid/emergency care priorities are completed.

If any of the observable signs of concussion are noted after a direct or indirect blow to the head, the athlete should be immediately and safely removed from participation and evaluated by an HCP.

The Glasgow Coma Scale is important as a standard measure for all patients and can be repeated over time to monitor deterioration of consciousness. The Maddocks questions and cervical spine exam are also critical steps of the immediate assessment.



APPENDIX I

Sport Concussion Assessment Tool 6 - SCAT6™

Step 1: Observable Signs

Witnessed ☐ Observed on Video ☐

Lying motionless on playing surface	Y	N
Falling unprotected to the surface	Y	N
Balance/gait difficulties, motor incoordination, ataxia: stumbling, slow/ laboured movements	Y	N
Disorientation or confusion, staring or limited responsiveness, or an inability to respond appropriately to questions	Y	N
Blank or vacant look	Y	N
Facial injury after head trauma	Y	N
Impact seizure	Y	N
High-risk mechanism of injury (sport-dependent)	Y	N

Step 2: Glasgow Coma Scale

Typically, GCS is assessed once. Additional scoring columns are provided for monitoring over time, if needed.

Time of Assessment:

Date of Assessment:

Best Eye Response (E)			
No eye opening	1	1	1
Eye opening to pain	2	2	2
Eye opening to speech	3	3	3
Eyes opening spontaneously	4	4	4

Best Verbal Response (V)			
No verbal response	1	1	1
Incomprehensible sounds	2	2	2
Inappropriate words	3	3	3
Confused	4	4	4
Oriented	5	5	5

Best Motor Response (V)			
No motor response	1	1	1
Extension to pain	2	2	2
Abnormal flexion to pain	3	3	3
Flexion/withdrawal to pain	4	4	4
Localized to pain	5	5	5
Obeys commands	6	6	6

Glasgow Coma Score (E + V + M)			

Box 1: Red Flags

- Neck pain or tenderness
- Seizure or convulsion
- Double vision
- Loss of consciousness
- Weakness or tingling/burning in more than 1 arm or in the legs
- Deteriorating conscious state
- Vomiting
- Severe or increasing headache
- Increasingly restless, agitated or combative
- GCS <15
- Visible deformity of the skull

Step 3: Cervical Spine Assessment

In a patient who is not lucid or fully conscious, a cervical spine injury should be assumed and spinal precautions taken.

Does the athlete report neck pain at rest?	Y	N
Is there tenderness to palpation?	Y	N
If NO neck pain and NO tenderness, does the athlete have a full range of ACTIVE pain free movement?	Y	N
Are limb strength and sensation normal?	Y	N

Step 4: Coordination & Ocular/Motor Screen

Coordination: Is finger-to-nose normal for both hands with eyes open and closed?	Y	N
Ocular/Motor: Without moving their head or neck, can the patient look side-to-side and up-and-down without double vision?	Y	N
Are observed extraocular eye movements normal? If not, describe:	Y	N

Step 5: Memory Assessment Maddocks Questions[1]

Say *"I am going to ask you a few questions, please listen carefully and give your best effort. First, tell me what happened?"*

Modified Maddocks questions (Modified appropriately for each sport; 1 point for each correct answer)

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		/5

Note: Appropriate sport-specific questions may be substituted

APPENDIX I

Sport Concussion Assessment Tool 6 - SCAT6™

Off-Field Assessment

Please note that the cognitive assessment should be done in a distraction-free environment with the athlete in a resting state **after** completion of the Immediate Assessment/Neuro Screen.

Step 1: Athlete Background

Has the athlete ever been:

Hospitalised for head injury? (If yes, describe below)	Y	N
Diagnosed/treated for headache disorder or migraine?	Y	N
Diagnosed with a learning disability/dyslexia?	Y	N
Diagnosed with attention deficit hyperactivity disorder (ADHD)?	Y	N
Diagnosed with depression, anxiety, or other psychological disorder?	Y	N

Notes:

Current medications? If yes, please list:

Step 2: Symptom Evaluation

Baseline: ☐ **Suspected/Post-injury:** ☐ **Time elapsed since suspected injury:** ______ mins/hours/days

The athlete will complete the symptom scale (below) after you provide instructions. Please note that the instructions are different for baseline versus suspected/post-injury evaluations.

Baseline: Say *"Please rate your symptoms below based on how you typically feel with "1" representing a very mild symptom and "6" representing a severe symptom."*

Suspected/Post-injury: Say *"Please rate your symptoms below based on how you feel now with "1" representing a very mild symptom and "6" representing a severe symptom."*

PLEASE HAND THE FORM TO THE ATHLETE

Symptom	Rating
Headaches	0 1 2 3 4 5 6
Pressure in head	0 1 2 3 4 5 6
Neck pain	0 1 2 3 4 5 6
Nausea or vomiting	0 1 2 3 4 5 6
Dizziness	0 1 2 3 4 5 6
Blurred vision	0 1 2 3 4 5 6
Balance problems	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
Feeling slowed down	0 1 2 3 4 5 6
Feeling like "in a fog"	0 1 2 3 4 5 6
"Don't feel right"	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
Fatigue or low energy	0 1 2 3 4 5 6
Confusion	0 1 2 3 4 5 6
Drowsiness	0 1 2 3 4 5 6
More emotional	0 1 2 3 4 5 6
Irritability	0 1 2 3 4 5 6
Sadness	0 1 2 3 4 5 6
Nervous or anxious	0 1 2 3 4 5 6
Trouble falling asleep (if applicable)	0 1 2 3 4 5 6

Do your symptoms get worse with physical activity?	Y	N
Do your symptoms get worse with mental activity?	Y	N

If 100% is feeling perfectly normal, what percent of normal do you feel?

If not 100%, why?

PLEASE HAND THE FORM BACK TO THE EXAMINER

Once the athlete has completed answering all symptom items, it may be useful for the clinician to revisit items that were endorsed positively to gather more detail about each symptom.

Total number of symptoms: ______ **of 22** **Symptom severity score:** ______ **of 132**

APPENDIX I

Sport Concussion Assessment Tool 6 - SCAT6™

Step 3: Cognitive Screening (Based on Standardized Assessment of Concussion; SAC)[2]

Orientation

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? (within 1 hour)	0	1
Orientation Score		of 5

Immediate Memory

All 3 trials must be administered irrespective of the number correct on Trial 1. Administer at the rate of one word per second.

Trial 1: Say *"I am going to test your memory. I will read you a list of words and when I am done, repeat back as many words as you can remember, in any order."*

Trials 2 and 3: Say *"I am going to repeat the same list. Repeat back as many words as you can remember in any order, even if you said the word before in a previous trial."*

Word list used: A ☐ B ☐ C ☐

List A	Trial 1		Trial 2		Trial 3		List B	List C
							Alternate Lists	
Jacket	0	1	0	1	0	1	Finger	Baby
Arrow	0	1	0	1	0	1	Penny	Monkey
Pepper	0	1	0	1	0	1	Blanket	Perfume
Cotton	0	1	0	1	0	1	Lemon	Sunset
Movie	0	1	0	1	0	1	Insect	Iron
Dollar	0	1	0	1	0	1	Candle	Elbow
Honey	0	1	0	1	0	1	Paper	Apple
Mirror	0	1	0	1	0	1	Sugar	Carpet
Saddle	0	1	0	1	0	1	Sandwich	Saddle
Anchor	0	1	0	1	0	1	Wagon	Bubble
Trial Total								

Immediate Memory Score: ____ of 30

Time Last Trial Completed: ____

APPENDIX I

Sport Concussion Assessment Tool 6 - SCAT6™

Step 3: Cognitive Screening (Continued)

Concentration

Digits Backward:

Administer at the rate of one digit per second reading DOWN the selected column. If a string is completed correctly, move on to the string with next higher number of digits; if the string is completed incorrectly, use the alternate string with the same number of digits; if this is failed again, end the test.

Say ***"I'm going to read a string of numbers and when I am done, you repeat them back to me in reverse order of how I read them to you. For example, if I say 7-1-9, you would say 9-1-7. So, if I said 9-6-8 you would say? (8-6-9)"***

Digit list used: A ☐ B ☐ C ☐

List A	List B	List C			
4-9-3	5-2-6	1-4-2	Y	N	0 1
6-2-9	4-1-5	6-5-8	Y	N	
3-8-1-4	1-7-9-5	6-8-3-1	Y	N	0 1
3-2-7-9	4-9-6-8	3-4-8-1	Y	N	
6-2-9-7-1	4-8-5-2-7	4-9-1-5-3	Y	N	0 1
1-5-2-8-6	6-1-8-4-3	6-8-2-5-1	Y	N	
7-1-8-4-6-2	8-3-1-9-6-4	3-7-6-5-1-9	Y	N	0 1
5-3-9-1-4-8	7-2-4-8-5-6	9-2-6-5-1-4	Y	N	
			Digits Score		of 4

Months in Reverse Order:

Say ***"Now tell me the months of the year in reverse order as QUICKLY and as accurately as possible. Start with the last month and go backward. So, you'll say December, November... go ahead"***

Start stopwatch and CIRCLE each correct response:

December November October September August July June May April March February January

Time Taken to Complete (secs): **Number of Errors:**

1 point if no errors and completion under 30 seconds

Months Score: of 1

Concentration Score (Digits + Months) of 5

Step 4: Coordination and Balance Examination

Modified Balance Error Scoring System (mBESS)[3] testing

(see detailed administration instructions)

Foot Tested: Left ☐ **Right** ☐ (i.e. test the **non-dominant** foot)

Testing Surface (hard floor, field, etc.):

Footwear (shoes, barefoot, braces, tape etc.):

OPTIONAL (depending on clinical presentation and setting resources): For further assessment, the same 3 stances can be performed on a surface of medium density foam (e.g., approximately 50cm x 40cm x 6cm) with the same instructions and scoring.

APPENDIX I

Sport Concussion Assessment Tool 6 - SCAT6™

Step 4: Coordination and Balance Examination (Continued)

Modified BESS (20 seconds each)

Double Leg Stance:		of 10
Tandem Stance:		of 10
Single Leg Stance:		of 10
Total Errors:		of 30

On Foam (Optional)

Double Leg Stance:		of 10
Tandem Stance:		of 10
Single Leg Stance:		of 10
Total Errors:		of 30

Note: If the **mBESS** yields normal findings then proceed to the **Tandem Gait/Dual Task Tandem Gait**.

If the **mBESS** reveals abnormal findings or clinically significant difficulties, **Tandem Gait** is not necessary at this time.

Both the **Tandem Gait** and optional **Dual Task** component may be administered later in the office setting as needed (see SCOAT6).

Timed Tandem Gait

Place a 3-metre-long line on the floor/firm surface with athletic tape. The task should be timed. Please complete all 3 trials.

Say ***"Please walk heel-to-toe quickly to the end of the tape, turn around and come back as fast as you can without separating your feet or stepping off the line."***

Single Task:

Time to Complete Tandem Gait Walking (seconds)				
Trial 1	Trial 2	Trial 3	Average 3 Trials	Fastest Trial

Dual Task Gait (Optional. Timed Tandem Gait must be completed first)

Place a 3-metre-long line on the floor/firm surface with athletic tape. The task should be timed.

Say ***"Now, while you are walking heel-to-toe, I will ask you to count backwards out loud by 7s. For example, if we started at 100, you would say 100, 93, 86, 79. Let's practise counting. Starting with 93, count backward by sevens until I say "stop"."*** Note that this practice only involves counting backwards.

Dual Task Practice: Circle correct responses; record number of subtraction counting errors.

Task									Errors	Time
Practice	93	86	72	65	58	51	44	37		

Say ***"Good. Now I will ask you to walk heel-to-toe and count backwards out loud at the same time. Are you ready? The number to start with is 88. Go!"***

Dual Task Cognitive Performance: Circle correct responses; record number of subtraction counting errors.

Task														Errors	Time (circle fastest)
Trial 1	88	81	74	67	60	53	46	39	32	25	18	11	4		
Trial 2	90	83	76	69	62	55	48	41	34	27	20	13	6		
Trial 3	98	91	84	77	70	63	56	49	42	35	28	21	14		

Alternate double number starting integers may be used and recorded below.

Starting Integer: ______ **Errors:** ______ **Time:** ______

APPENDIX I

Sport Concussion Assessment Tool 6 - SCAT6™

Step 4: Coordination and Balance Examination (Continued)

Were any single- or dual-task, timed tandem gait trials not completed due to walking errors or other reasons?

Yes ☐ **No** ☐

If yes, please explain why:

Step 5: Delayed Recall

The Delayed Recall should be performed after **at least 5 minutes** have elapsed since the end of the Immediate Memory section: **Score 1 point for each correct response.**

Say ***"Do you remember that list of words I read a few times earlier? Tell me as many words from the list as you can remember in any order."***

Time started:

Word list used: A ☐ B ☐ C ☐

List A	Score	List B (Alternate Lists)	List C (Alternate Lists)
Jacket	0 1	Finger	Baby
Arrow	0 1	Penny	Monkey
Pepper	0 1	Blanket	Perfume
Cotton	0 1	Lemon	Sunset
Movie	0 1	Insect	Iron
Dollar	0 1	Candle	Elbow
Honey	0 1	Paper	Apple
Mirror	0 1	Sugar	Carpet
Saddle	0 1	Sandwich	Saddle
Anchor	0 1	Wagon	Bubble
Delayed Recall Score	of 10		

Total Cognitive Score

Orientation: of 5

Immediate Memory: of 30

Concentration: of 5

Delayed Recall: of 10

Total: of 50

If the athlete was known to you prior to their injury, are they different from their usual self?

Yes ☐ **No** ☐ **Not applicable** ☐ (If different, describe why In the clinical notes section)

APPENDIX I

Sport Concussion Assessment Tool 6 - SCAT6™

Step 6: Decision

Domain	Date:	Date:	Date:
Neurological Exam (Acute Injury evaluation only)	Normal/Abnormal	Normal/Abnormal	Normal/Abnormal
Symptom number (of 22)			
Symptom Severity (of 132)			
Orientation (of 5)			
Immediate Memory (of 30)			
Concentration (of 5)			
Delayed Recall (of 10)			
Cognitive Total Score (of 50)			
mBESS Total Errors (of 30)			
Tandem Gait fastest time			
Dual Task fastest time			

Disposition

Concussion diagnosed?

Yes ☐ No ☐ Deferred ☐

Health Care Professional Attestation

I am an HCP and I have personally administered or supervised the administration of this SCAT6.

Name:

Signature: Title/Speciality:

Registration/License number (if applicable): Date:

Additional Clinical Notes

Note: Scoring on the SCAT6 should not be used as a stand-alone method to diagnose concussion, measure recovery, or make decisions about an athlete's readiness to return to sport after concussion. Remember: An athlete can score within normal limits on the SCAT6 and still have a concussion.

APPENDIX J

Sport Concussion Office Assessment Tool 6 - SCOAT6™

SCOAT6™ Sport Concussion Office Assessment Tool
For Adults & Adolescents (13 years +)

Current Injury

Removal From Play: Immediate ☐ Continued to play for ___________ mins ☐

Walked off ☐ Assisted off ☐ Stretchered off ☐

Date of Injury:

Description - include mechanism of injury, presentation, management since the time of injury and trajectory of care since injury:

Date Symptoms First Appeared: Date Symptoms First Reported:

History of Head Injuries

Date/Year	**Description** - include mechanism of injury, presentation, management since the time of injury and trajectory of care since injury	**Management** - including time off work, school or sport

History of Any Neurological, Psychological, Psychiatric or Learning Disorders

Diagnosis	Year Diagnosed	Management Including Medication
☐ Migraine		
☐ Chronic headache		
☐ Depression		
☐ Anxiety		
☐ Syncope		
☐ Epilepsy/seizures		
☐ Attention deficit hyper-activity disorder (ADHD)		
☐ Learning disorder/ dyslexia		
☐ Other_____________		

APPENDIX J

Sport Concussion Office Assessment Tool 6 - SCOAT6™

List All Current Medications - including over-the-counter, naturopathic and supplements

Item	Dose	Frequency	Reason Taken

Family History of Any Diagnosed Neurological, Psychological, Psychiatric, Cognitive or Developmental Disorders

Family Member	Diagnosis	Management Including Medication
	☐ Depression	
	☐ Anxiety	
	☐ Attention deficit hyper-activity disorder (ADHD)	
	☐ Learning disorder/ dyslexia	
	☐ Migraine	
	☐ Other ______	

Additional Notes:

APPENDIX J

Sport Concussion Office Assessment Tool 6 - SCOAT6™

Symptom Evaluation

Please rate your symptoms below based on how you feel now with **"1"** representing a very mild symptom and **"6"** representing a severe symptom.

0	1	2	3	4	5	6
None	Mild		Moderate		Severe	

Symptom	Date of Assessment				
	Pre-injury	Day injured (date) ______	Consult 1 ______	Consult 2 ______	Consult 3 ______
	Rating	Rating	Rating	Rating	Rating
Headaches					
Pressure in head					
Neck pain					
Nausea or vomiting					
Dizziness					
Blurred vision					
Balance problems					
Sensitivity to light					
Sensitivity to noise					
Feeling slowed down					
Feeling like "in a fog"					
Difficulty concentrating					
Difficulty remembering					
Fatigue or low energy					
Confusion					
Drowsiness					
More emotional					
Irritability					
Sadness					
Nervous or anxious					
Sleep disturbance					
Abnormal heart rate					
Excessive sweating					
Other ______________________					

APPENDIX J

Sport Concussion Office Assessment Tool 6 - SCOAT6™

Symptom Evaluation (Continued)

Symptom	Date of Assessment				
	Pre-injury	Day injured (date)	Consult 1	Consult 2	Consult 3
	Rating	Rating	Rating	Rating	Rating
Do symptoms worsen with physical activity?					
Do symptoms worsen with cognitive (thinking) activity?					
Symptom number					
Symptom severity score					
What percentage of normal do you feel?					

Verbal Cognitive Tests

Immediate Memory

All 3 trials must be administered irrespective of the number correct on Trial 1. Administer at the rate of one word per second in a monotone voice.

Trial 1: Say ***"I am going to test your memory. I will read you a list of words and when I am done, repeat back as many words as you can remember, in any order."***

Trials 2 and 3: Say ***"I am going to repeat the same list. Repeat back as many words as you can remember in any order, even if you said the word before in a previous trial."***

Word list used: A ☐ B ☐ C ☐

List A	Trial 1	Trial 2	Trial 3	Alternate Lists: List B	Alternate Lists: List C
Jacket	0 1	0 1	0 1	Finger	Baby
Arrow	0 1	0 1	0 1	Penny	Monkey
Pepper	0 1	0 1	0 1	Blanket	Perfume
Cotton	0 1	0 1	0 1	Lemon	Sunset
Movie	0 1	0 1	0 1	Insect	Iron
Dollar	0 1	0 1	0 1	Candle	Elbow
Honey	0 1	0 1	0 1	Paper	Apple
Mirror	0 1	0 1	0 1	Sugar	Carpet
Saddle	0 1	0 1	0 1	Sandwich	Saddle
Anchor	0 1	0 1	0 1	Wagon	Bubble
Trial Total					

Immediate Memory Total __________ of 30

Time last trial completed:

APPENDIX J

Sport Concussion Office Assessment Tool 6 - SCOAT6™

Verbal Cognitive Tests: Alternate 15-word lists

Alternate 15-word lists may be accessed by scanning or clicking the QR code.

Record the total below.

Total ____________ of 45

Digits Backwards

Administer at the rate of one digit per second in a monotone voice reading DOWN the selected column. If a string is completed correctly, move on to the string with next higher number of digits; if the string is completed incorrectly, use the alternate string with the same number of digits; if this is failed again, end the test.

Say ***"I'm going to read a string of numbers and when I am done, you repeat them back to me in reverse order of how I read them to you. For example, if I say 7-1-9, you would say 9-1-7. So, if I said 9-6-8 you would say? 8-6-9"***

Digit list used: **A** ☐ **B** ☐ **C** ☐

List A	List B	List C			
4-9-3	5-2-6	1-4-2	Y	N	0 1
6-2-9	4-1-5	6-5-8	Y	N	
3-8-1-4	1-7-9-5	6-8-3-1	Y	N	0 1
3-2-7-9	4-9-6-8	3-4-8-1	Y	N	
6-2-9-7-1	4-8-5-2-7	4-9-1-5-3	Y	N	0 1
1-5-2-8-6	6-1-8-4-3	6-8-2-5-1	Y	N	
7-1-8-4-6-2	8-3-1-9-6-4	3-7-6-5-1-9	Y	N	0 1
5-3-9-1-4-8	7-2-4-8-5-6	9-2-6-5-1-4	Y	N	
			Digits score		of 4

Months in Reverse Order

Say ***"Now tell me the months of the year in reverse order as QUICKLY and as accurately as possible. Start with the last month and go backward. So, you'll say December, November… go ahead"***

Start stopwatch and CIRCLE each correct response:

December November October September August July June May April March February January

Time Taken to Complete (secs): ______ (N <30 sec) **Number of Errors:** ______

APPENDIX J

Sport Concussion Office Assessment Tool 6 - SCOAT6™

Examination

Orthostatic Vital Signs

The first blood pressure and heart rate measurements are taken after the patient lies supine on the examination table for at least 2 minutes. The patient is then asked to stand up without support and with both feet firmly on the ground and the second measurements are taken after standing for 1 minute. Ask the patient if they experience any dizziness or light-headedness upon standing (initial orthostatic intolerance) or by one minute (orthostatic intolerance).

Orthostatic Vital Signs	Supine	Standing (after 1 minute)
Blood Pressure (mmHg)		
Heart Rate (bpm)		
Symptoms[1] • Dizziness or light-headedness • Fainting • Blurred or fading vision • Nausea • Fatigue • Lack of concentration	No ☐ Yes ☐ If yes: Description	No ☐ Yes ☐ If yes: Description
Results	☐ Normal	☐ Abnormal

Test results are deemed clinically significant if they include at least one of the following AND symptoms:
(1) systolic BP drop of ≥ 20mmHg or (2) diastolic BP drop of ≥ 10mmHg (3) HR decreases (4) HR increases by > 30bpm

Cervical Spine Assessment

Cervical Spine Palpation	Signs and Symptoms
Muscle Spasm	☐ Normal ☐ Abnormal
Midline Tenderness	☐ Normal ☐ Abnormal
Paravertebral Tenderness	☐ Normal ☐ Abnormal

Cervical Active Range of Motion	Result
Flexion (50-70°)	☐ Normal ☐ Abnormal
Extension (60-85°)	☐ Normal ☐ Abnormal
Right Lateral Flexion (40-50°)	☐ Normal ☐ Abnormal
Left Lateral Flexion (40-50°)	☐ Normal ☐ Abnormal
Right Rotation (60-75°)	☐ Normal ☐ Abnormal
Left Rotation (60-75°)	☐ Normal ☐ Abnormal

APPENDIX J

Sport Concussion Office Assessment Tool 6 - SCOAT6™

Neurological Examination

Cranial Nerves

Normal ☐ Abnormal ☐ Not tested ☐

Notes:

Other Neurological Findings

Limb Tone:	Normal	☐	Abnormal	☐	Not tested	☐
Strength:	Normal	☐	Abnormal	☐	Not tested	☐
Deep Tendon Reflexes:	Normal	☐	Abnormal	☐	Not tested	☐
Sensation:	Normal	☐	Abnormal	☐	Not tested	☐
Cerebellar Function:	Normal	☐	Abnormal	☐	Not tested	☐

Comments:

Balance

Barefoot on a firm surface with or without foam mat.

Foot Tested: Left ☐ **Right** ☐ (i.e. test the **non-dominant** foot)

Modified BESS

Double Leg Stance:		of 10
Tandem Stance:		of 10
Single Leg Stance:		of 10
Total Errors:		of 30

On Foam

Double Leg Stance:		of 10
Tandem Stance:		of 10
Single Leg Stance:		of 10
Total Errors:		of 30

Timed Tandem Gait

Place a 3-metre-long line on the floor/firm surface with athletic tape.

Say ***"Please walk heel-to-toe quickly to the end of the tape, turn around and come back as fast as you can without separating your feet or stepping off the line."***

Time to Complete Tandem Gait Walking (seconds)				
Trial 1	Trial 2	Trial 3	Average 3 Trials	Fastest Trial

Abnormal/failed to complete ☐ Unstable/sway ☐ Fall/over-step ☐ Dizzy/nauseous ☐

APPENDIX J

Sport Concussion Office Assessment Tool 6 - SCOAT6™

Complex Tandem Gait

Forward

Say ***"Please walk heel-to-toe quickly five steps forward, then continue forward with eyes closed for five steps"*** 1 point for each step off the line, 1 point for truncal sway or holding onto an object for support.

Forward Eyes Open **Points:**

Forward Eyes Closed **Points:**

Forward Total Points:

Backward

Say ***"Please walk heel-to-toe again, backwards five steps eyes open, then continue backwards five steps with eyes closed."*** 1 point for each step off the line, 1 point for truncal sway or holding onto an object for support.

Backward Eyes Open **Points:**

Backward Eyes Closed **Points:**

Backward Total Points:

Total Points (Forward + Backward):

Dual Task Gait

Say ***"Now, while you are walking heel-to-toe, I will ask you to recite the following words in reverse order / count backwards out loud by 7s (for instance starting at 100, then 93, 86 etc,) / recite the months of the year in reverse order"***

(select one cognitive task). Allow for a verbal practice attempt of the cognitive task selected.

Cognitive Tasks												
Trial 1 (Words - spell backwards)	VISIT	ALERT	FENCE	BRAVE	MOUSE	DANCE	CRAWL	LEARN				
OR Trial 2 (Subtract serial 7s)	95	88	81	74	67	60	53	46				
OR Trial 3 (Months backwards)	December	November	October	September	August	July	June	May	April	March	February	January

Before attempting the dual task: ***"Good. Now I will ask you to walk heel-to-toe calling the answers out loud at the same time. Are you ready?"***

Number of Trials Attempted: **Number of Correct Trials:** **Average Time (s):**

Cognitive Accuracy Score (Number Correct / Number Attempted):

Comments:

APPENDIX J

Sport Concussion Office Assessment Tool 6 - SCOAT6™

Modified Vestibular/Ocular-Motor Screening (mVOMS) for Concussion

For detailed instructions please see the Supplement.

mVOMS	Not Tested	Headache	Dizziness	Nausea	Fogginess	Comments
Baseline symptoms	**N/A**					
Smooth pursuits (2 horizontal and 2 vertical, 2 seconds to go full distance right-left and back; up-down and back)						
Saccades – Horizontal (10 times each direction)						
VOR – Horizontal (10 repetitions) (metronome set at 180 beats per minute – change direction at each beep, wait 10 secs to ask symptoms)						
VMS (x 5, 80° rotation side to side) (at 50 bpm, change direction each beep, wait 10 secs to ask symptoms)						

Anxiety Screen

Not Done ☐

Assign scores of 0, 1, 2, and 3 to the response categories, respectively, of **"not at all," "several days," "more than half the days,"** and **"nearly every day."**

Over the last 2 weeks, how often have you been bothered by any of the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it's hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3

Anxiety Screen Score: ______

0–4: minimal anxiety
5–9: mild anxiety
10–14: moderate anxiety
15–21: severe anxiety

Depression Screen

Not Done ☐

The purpose is to screen for depression in a "first-step" approach. Patients who screen positive should be further evaluated with the PHQ-9 to determine whether they meet criteria for a depressive disorder.

Over the last 2 weeks, how often have you been bothered by any of the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed or hopeless	0	1	2	3

Depression Screen Score: ______ **(Ranges from 0-6, 3 being the cutpoint to screen for depression)**

APPENDIX J

Sport Concussion Office Assessment Tool 6 - SCOAT6™

Sleep Screen

Not Done ☐

1. During the past week how many hours of actual sleep did you get at night? (This may be different than the number of hours you spent in bed.)	
5 to 6 hours	4
6 to 7 hours	3
7 to 8 hours	2
8 to 9 hours	1
More than 9 hours	0

2. How satisfied/dissatisfied were you with the quality of your sleep?	
Very dissatisfied	4
Somewhat dissatisfied	3
Somewhat satisfied	2
Satisfied	1
Very satisfied	0

3. During the recent past, how long has it usually taken you to fall asleep each night?	
Longer than 60 minutes	3
31-60 minutes	2
16-30 minutes	1
15 minutes or less	0

4. How often do you have trouble staying asleep?	
Five to seven times a week	3
Three of four times a week	2
Once or twice a week	1
Never	0

5. During the recent past, how often have you taken medicine to help you sleep? (prescribed or over-the-counter)	
Five to seven times a week	3
Three of four times a week	2
Once or twice a week	1
Never	0

Sleep Screen Score:

A higher sleep disorder score (SDS) indicates a greater likelihood of a clinical sleep disorder:
0-4 (Normal)
5-7 (Mild)
8-10 (Moderate)
11-17 (Severe)

APPENDIX J

Sport Concussion Office Assessment Tool 6 - SCOAT6™

Delayed Word Recall

Minimum of 5 minutes after immediate recall

Say *"Do you remember that list of words I read a few times earlier? Tell me as many words from the list as you can remember in any order."*

Word list used: A ☐ B ☐ C ☐

		Alternate Lists	
List A	**Score**	**List B**	**List C**
Jacket	0 1	Finger	Baby
Arrow	0 1	Penny	Monkey
Pepper	0 1	Blanket	Perfume
Cotton	0 1	Lemon	Sunset
Movie	0 1	Insect	Iron
Dollar	0 1	Candle	Elbow
Honey	0 1	Paper	Apple
Mirror	0 1	Sugar	Carpet
Saddle	0 1	Sandwich	Saddle
Anchor	0 1	Wagon	Bubble

Score: ______ of 10 **Record Actual Time (mins) Since Completing Immediate Recall:** ______

Computerised Cognitive Test Results (if used)

Not Done ☐

Test Battery Used:

Recent Baseline - if performed (Date):

Post-Injury Result (Rest):

Post-Injury Result (Post-Exercise Stress):

Graded Aerobic Exercise Test

Not Done ☐

Exclude contra-indications: cardiac condition, respiratory disease, significant vestibular symptoms, motor dysfunction, lower limb injuries, cervical spine injury.

Protocol Used:

Overall Assessment

Summary:

APPENDIX J

Sport Concussion Office Assessment Tool 6 - SCOAT6™

Management and Follow-up Plan

Cervical or brain imaging (X-rays/CT/MRI) ☐

Imaging Requested:

Reason:

Findings:

Recommendations regarding return to:

Class:

Work:

Driving:

Sport:

(See revised graduated return-to-learn and return-to-sport guidelines)

Referral

Further assessment, intervention or management

Assessment by:	Name:
☐ Athletic Trainer/Therapist	
☐ Exercise Physiologist	
☐ Neurologist	
☐ Neuropsychologist	
☐ Neurosurgeon	
☐ Opthalmologist	
☐ Optometrist	
☐ Paediatrician	
☐ Physiatrist/Rehab Phys	
☐ Physiotherapist	
☐ Psychologist	
☐ Psychiatrist	
☐ Sport and Exercise Medicine Phys	
☐ Other	

Pharmacotherapy Prescribed:

Date of Review: Date of Follow-up: