

REPORT OF THE NCAA COMMITTEE ON COMPETITIVE SAFEGUARDS AND MEDICAL ASPECTS OF SPORTS SEPTEMBER 19-20, 2023, MEETING

ACTION ITEM.

1. Legislative Item.

- NCAA Bylaw 18 Remove Cannabinoids from the List of NCAA Banned Drug Classes.
 - (1) <u>Recommendation</u>. That each division introduce and adopt legislation to remove cannabinoids from the list of NCAA banned drug classes.
 - (2) <u>Effective Date</u>. Immediate.
 - (3) <u>Rationale</u>. The NCAA Committee on Competitive Safeguards and Medical Aspects of Sports recommended the removal of cannabinoids from the list of NCAA banned substances based on extensive study informed by subject matter experts (including medical doctors, substance misuse experts and membership practitioners), consensus opinion from the 2022 Summit on Cannabis in Collegiate Athletics and referrals from Divisions II and III to consider banning only performance enhancing drugs. Removing cannabinoids from the list of banned substances does not condone or promote cannabinoid use; instead, it acknowledges the ineffectiveness of existing policy (prevention and penalty) and aims to recenter studentathlete health while recognizing the shifting cultural and legal landscapes surrounding cannabinoid use. In summary, removing cannabinoids from the list of banned substances:
 - 1. Acknowledges the ineffectiveness of existing policy (prevention and penalty);
 - 2. Affirms the role of the NCAA drug-testing program to address only performance-enhancing substances;
 - 3. Emphasizes the importance of moving toward a harm-reduction strategy, like alcohol, that prioritizes education and support over penalty;
 - 4. Realigns toward local testing and education efforts to identify problematic cannabinoid use; and
 - 5. Notes that educating student-athletes on the health threats posed by contemporary cannabis and methods of use is more effective than a prevention approach.

Report of the NCAA Committee on Competitive Safeguards and Medical Aspects of Sports Meeting September 19-20, 2023 Page No. 2

Finally, the committee determined that the proposal, if adopted, would apply retroactively to any penalty associated with a previous positive test; thereby, rendering the penalty moot.

- (4) Estimated Budget Impact. None.
- (5) <u>Student-Athlete Impact</u>. The recommendation aims to recenter studentathlete health by taking a harm-reduction approach to cannabinoid use.

2. Nonlegislative Items.

• None.

INFORMATIONAL ITEMS.

- 1. Approval of June 13-14, 2023, meeting report. The NCAA Committee on Competitive Safeguards and Medical Aspects of Sports approved the report of its June 13-14, 2023, meeting.
- 2. Mental health.
 - a. <u>Mental Health Advisory Group update</u>. CSMAS received an update on the work of the NCAA Mental Health Advisory Group. The Mental Health Advisory Group met June 28-29 and discussed feedback from CSMAS' June meeting on recommended foundational statements for updating the NCAA Mental Health Best Practices, including association-wide feasibility (Attachment A). It also discussed emerging topics for consideration as part of its recommendations, including social media, suicide contagion and supporting the mental health of LGBTQ+ student-athletes.
 - b. <u>Mental Health Best Practices update</u>. CSMAS reviewed and provided feedback on a working draft of the Second Edition of the Mental Health Best Practices document as recommended by the Mental Health Advisory Group. CSMAS supported the proposed updates and noted that it will meet in December and expects to recommend that the NCAA Board of Governors take final action to approve the document at its January 2024 meeting.
 - c. <u>Webinar series update</u>. CSMAS received an update on the SSI Spotlight on Mental Health Best Practices webinar series. The five-installment series was created to generate interest for pending updates to the Mental Health Best Practices and highlight current membership initiatives on mental health. CSMAS noted that the

series has been successful and supported its continuation to educate the membership on other timely topics.

- **3.** Litigation updates. CSMAS received a briefing on the ongoing litigation relevant to its work.
- 4. Governance updates.
 - a. <u>Divisional updates</u>. CSMAS received a governance update from each of the divisions.
 - b. <u>CSMAS Contributions to Division I Transformation Committee</u>. CSMAS referred the management of work on health and safety related outcomes from the NCAA Division I Transformation Committee (including recommendations from the NCAA Division I Strategic Vision and Planning Committee and NCAA Committee on Competitive Safeguards and Medical Aspects of Sports Health and Safety Subgroup) and the student-athlete holistic model to the NCAA Committee on Competitive Safeguards and Medical Aspects of Sports Administrative Subcommittee.
 - c. <u>Division III Mental Health Hardship Waiver</u>. CSMAS received an update on work completed by the NCAA Division III Student-Athlete Reinstatement Committee to refine requirements for Division III hardship waivers involving mental health as mitigation. It is possible that the Division III Student-Athlete Reinstatement Committee may request additional feedback from CSMAS at a future meeting.
 - d. <u>Division III Athletic Training Working Group</u>. CSMAS received an update on the creation of a Division III Athletic Training Working Group to discuss athletic training work force issues.

5. Subcommittee reports.

a. Administrative Subcommittee.

- (1) <u>Review of subcommittee activity</u>. CSMAS received the reports of its Administrative Subcommittee videoconferences since June 2023.
- (2) <u>Athletic training workforce issues</u>. CSMAS continued to discuss ongoing athletic training workforce issues. It reviewed the report (Attachment B) of a recent meeting between leadership of athletic training organizations and representatives from the membership and approved a complementary statement to assist in standardizing the membership's understanding of AT workforce dynamics and to emphasize possible solutions (Attachment C).

- (3) <u>Legislative proposals</u>. CSMAS took positions, as recommended by the AdCom, on 2024 NCAA Convention Division II proposals, as follows:
 - Proposal No. 2024-1 (playing and practice seasons football preseason practice and first contest first permissible contest).
 CSMAS agreed to take no position.
 - (b) Proposal No. 2024-2 (playing and practice seasons softball number of contests maximum limitations institutional and student-athlete championship and nonchampionship contests). CSMAS <u>opposed</u> this proposal. CSMAS noted that additional athletic activity entails additional risk of injury. In addition, and of timely concern, CSMAS noted the impact and burden on institutional medical and athletic training staff, especially given the current membership concerns with the collegiate athletic training workforce.
- (4) <u>NCAA Board of Governors review of Association-wide committees</u>. CSMAS was informed of the AdCom's response to the Board of Governors' request for information to support its review of Association-wide committees following the adoption of the new NCAA Constitution. This work was referred to the AdCom in June 2023.

b. Drug-Testing Subcommittee.

- (1) <u>Review of subcommittee activity.</u> CSMAS received the reports of its Drug-Testing Subcommittee videoconferences since June 2023.
- (2) <u>Cannabinoid education and messaging.</u> CSMAS received an update on work following the 2022 Summit on Cannabis in Collegiate Athletics to create consensus-based, foundational statements to create education and messaging for schools as they work to prevent, identify and manage problematic cannabinoid use in student-athletes. A final plan for education and communication is expected by early 2024.
- (3) <u>Cannabinoid policy.</u> CSMAS recommended the creation of a robust question and answer document to support its recommendation that each division introduce and adopt legislation to remove cannabinoids from the list of NCAA banned substances (see Legislative Action Item).

c. Research Subcommittee.

- (1) <u>Review of subcommittee activity</u>. CSMAS received the reports of its Research Subcommittee videoconferences since June 2023.
- (2) <u>IPP Health & Safety Survey update</u>. CSMAS approved changes to the 2023-24 Institutional Performance Program Health and Safety Survey, as recommended by the Research Subcommittee. Completion of the updated annual IPP Health and Safety Survey is required of NCAA Divisions I and II schools. The survey will be distributed to Division I and II schools on Tuesday November 21, 2023, and will close on Friday, January 26, 2024.
- 6. Drug Free Sport International update. CSMAS received an update from Drug-Free Sport International on the NCAA year-round and championship drug-testing programs for the 2022-23 academic year. The program summary included the rate of NCAA banned substances detected, the number of appeals conducted, and the number of administrative reviews conducted for student-athlete exit tests.

7. NCAA Injury Surveillance Program.

- a. <u>Operational update</u>. CSMAS received an update on membership participation in the NCAA Injury Surveillance Program. Consistent efforts to promote membership participation have been underway for the past year, and there is some evidence that participation levels in Divisions II and III are slowly increasing from post-COVID levels.
- b. <u>Seasonal ISP report review</u>. CSMAS reviewed the 2022-23 fall sport report that was generated from ISP data.
- 8. National Federation of State High School Association update. CSMAS received an update on the National Federation of State High School Associations' Sports Medicine Advisory Committee.
- **9.** NCAA Sports Medicine Handbook update. CSMAS received an update on the status of substantive updates to the Sports Medicine Handbook. The revisions are expected to be finalized prior to the 2024-25 academic year.
- **10.** NCAA transgender student-athlete participation policy update. CSMAS discussed the current NCAA transgender student-athlete participation policy and received an overview of emerging trends in sport-governing body policies, state laws and proposed federal regulations. It noted that the AdCom, in collaboration with other relevant committees, will

consider if any recommendations should be made for the 2024-25 academic year. Recommendations, if any, would be considered at CSMAS' December meeting for Board of Governors' consideration in January 2024.

11. Concussion.

- a. <u>Recommendations for Concussion Safety Protocol Checklist</u>. CSMAS approved updates to the Concussion Safety Protocol Checklist (Attachment D), as recommended by the NCAA Concussion Safety Advisory Group. The updated checklist and corresponding Concussion Safety Protocol Template (Attachment E) will be effective January 15, 2024.
- b. <u>Fact Sheets</u>. CSMAS approved updates to the three fact sheets (for student-athletes, educators and coaches) (Attachments F, G and H), as recommended by the Concussion Safety Advisory Group. The fact sheets will be released to the membership along with the updated Concussion Safety Protocol Checklist and Concussion Safety Protocol Template.
- c. <u>Sports Medicine Handbook Concussion Guideline</u>. CSMAS supported proposed revisions to the concussion chapter in the NCAA Sports Medicine Handbook.
- d. <u>Mind Matters Update</u>. CSMAS referred to the Research Subcommittee review and authority to approve a plan to use remaining funds allocated to Mind Matters. Mind Matters is part of the NCAA-U.S. Department of Defense Grand Alliance. Mind Matters fosters research and programming aimed at changing concussion safety behaviors and the culture of concussion reporting and management.
- 12. CSMAS Advisory Groups. CSMAS approved revised charters for the Concussion Safety Advisory Group and the Mental Health Advisory Group. It was also updated on the development of three additional advisory groups commissioned in June 2023: (a) Sport-Related Illness and Injury; (b) Performance and Training; and (c) Social and Interpersonal Health. It is expected that the Performance and Training Advisory Group will take shape during the 2023-24 academic year with a Performance Technology Summit to occur prior to the end of 2024.

Committee Chair:	James Houle, The Ohio State University
Staff Liaisons:	Leilani Hubbard, NCAA Academic and Membership Affairs
	John Parsons, NCAA Sport Science Institute
	Anne Rohlman, NCAA Sport Science Institute

NCAA Committee on Competitive Safeguards and Medical Aspects of Sports

Report of the NCAA Committee on Competitive Safeguards and Medical Aspects of Sports Meeting September 19-20, 2023 Page No. 7

_

September 19-20, 2023, Meeting		
Attendees:		
Matt Barany, University of Richmond		
Pam Hinton-Bruzina, University of Missouri, Columbia		
Deena Casiero, University of Connecticut		
Jami Clinton, University of Texas at Dallas		
Timothy Coffey, Longwood University		
Bob Colgate, National Federation High School Association		
Sarah Dowd, Michigan Technological University		
Jack Entriken, Kutztown University of Pennsylvania		
Kenneth Ferguson, University of Missouri-Kansas City		
Deanna Hand, Houghton University		
Alan Hirahara, California State University, Sacramento		
Richard Hendricks, Shorter University		
James Houle, The Ohio State University		
Nadine Mastroleo, Binghamton University		
Ally Meehan, Wagner College		
Austin Mondello, Colorado Mesa University		
Amanda Phillips, University of Louisiana at Lafayette		
Jamie Potter, University of California, Irvine		
Sarah Ramey, West Texas A&M University		
Rohan Springer, University of Texas at Dallas		
Leah Thomas, Georgia Institute of Technology		
Michelle Walsh, Vassar College		
Rich Wanninger, Patriot League		
Absentees:		
Brad Anawalt, University of Washington		
Jack Turban, Physician		
Guests in Attendance:		
Avinash Chandran, Michelle Dorsey and Neel Rao.		

NCAA Staff Liaison (or Staff Support if subcommittee) in Attendance:

Leilani Hubbard, John Parsons and Anne Rohlman.

Other NCAA Staff Members in Attendance:

Laura Arnett, Amanda Conklin, Rachel Denton, Amanda Dickey, LaGwyn Durden, Alicia Fine, Brian Hainline, Greg Johnson, Maritza Jones, Mallory Mickus, Leilyn Miles, Greg Pottorff, Alex Purcell, Stephanie Quigg, Crystal Rogers, Luke Schultheis, Jared Tidemann, Jerry Vaughn and Carey Wheelhouse.



REPORT OF THE NCAA MENTAL HEALTH ADVISORY GROUP JUNE 28-29, 2023, VIDEOCONFERENCE

INFORMATIONAL ITEMS.

1. **Scope of work and consensus-building update.** The NCAA Mental Health Advisory Group continued developing recommendations to update the <u>Interassocation Consensus</u> <u>Document: Mental Health Best Practices</u>. Specifically, the MHAG discussed the results of the MHAG representative consensus-building survey. Survey results demonstrated consensus for all foundational premise statements and for the usefulness of best practice recommendation statements. Survey results also indicated consensus on the feasibility of most best practice recommendation statements. The MHAG discussed qualitative survey feedback and suggested considerations for enhancing feasibility.

At the conclusion of its work to review the Mental Health Best Practices, the MHAG will provide final consensus-based recommendations, including foundational premise statements and best practice recommendation statements, to the NCAA Committee on Competitive Safeguards and Medical Aspects of Sports. It is expected CSMAS will consider final recommendations at its December 2023 meeting.

2. **CSMAS feedback review and discussion.** The MHAG discussed CSMAS feedback on MHAG recommendation statements, including association-wide feasibility of the recommendations, as well as considerations in the areas of quality improvement, trauma-informed practices and mental health resources.

Additionally, the MHAG received an overview of a potential webinar series to highlight membership implementation of the existing Mental Health Best Practices and to provide information about the pending updates.

- 3. **Emerging topics.** The MHAG discussed emerging topics for consideration as part of the MHBP update, including social media and mental health, suicide contagion and supporting the mental health of LGBTQ+ athletes. The discussion included presentations from subject matter experts and consideration of potential resources.
- 4. **Future meeting schedule**. The MHAG will convene via videoconference in October 2023.

Staff Liaison: Carey Wheelhouse, NCAA Sport Science Institute

NCAA Mental Health Advisory Group		
June 28-29, 2023, Videoconference		
Attendees:		
Scott Anderson, College Athletic Trainers' Society		
Laura Amaya, NCAA Division II Student-Athlete Advisory Committee		
Anna Baeth, Athlete Ally		
Randy Barker, NCAA Division III Governance		

NCAA Mental Health Advisory Group

June 28-29, 2023 Videoconference

Page No. 2

Jessica Bartley, United States Olympic and Paralympic Committee Rebecca Benghiat, JED Foundation JoAnne Bullard, Faculty Athletics Representatives Association Peggy Davis, NCAA Division II Governance Stacy Desmond, NCAA Division III Governance *alternative representative Carla Edwards, International Society for Sport Psychiatry Sofia España Pérez, NCAA Division I Governance Rachel Frank, American Orthopaedic Society for Sports Medicine Darcy Gruttadaro, National Alliance on Mental Illness Bob Harmison, Association for Applied Sport Psychology Brandon Harris, Society for Sport, Exercise & Performance Psychology James Houle, NCAA Committee on Competitive Safeguards and Medical Aspects of Sports Megan Koch, NCAA Division III Student-Athlete Advisory Committee Alan Lorenz, Higher Education Mental Health Alliance Jennifer O'Donoghue, National Athletic Trainer's Association Casey Pick, The Trevor Project Ashwin Rao, American Medical Society for Sports Medicine Jerry Reynolds, Alliance for Social Workers in Sports Mark Rogers, American Osteopathic Academy of Sports Medicine Jeni Shannon, Clinical/Counseling Sport Psychology Association Allyson Meehan, NCAA Division I Student-Athlete Advisory Committee Alisia (Giac-Thao) Tran, Asian American Psychological Association Jon Vore, NCAA Division I Student-Athlete Advisory Committee William Neupert, NCAA Division I Student-Athlete Advisory Committee *alternative representative Absentees: Vedika Anand, NCAA Board of Governors Student-Athlete Experience Committee Allison Brager, Sleep Research Society Daniel Foster, Society of Indian Psychologists Myles Jackson, NCAA Division II Student-Athlete Advisory Committee Division III SAAC Representative, TBD **Guests in Attendance:** Mary Bowman, Jonathan Briggs, Rafael Campos, Vivek Murthy, Office of the Surgeon General, Jane Richter, Tyler Rodgers and Robin Scholefield. NCAA Staff Liaison (or Staff Support if subcommittee) in Attendance: Carey Wheelhouse. Other NCAA Staff Members in Attendance: Laura Arnett, Amanda Dickey, LaGwyn Durden, Alicia Fine, Kelsey Gurganus-Wright, Dallas

Laura Arnett, Amanda Dickey, LaGwyn Durden, Alicia Fine, Kelsey Gurganus-Wright, Dallas Hack, Brian Hainline, Charlie Henry, Emily Kroshus, Jean Merrill, John Parsons, Greg Pottorff, Alex Purcell, Crystal Rogers, Anne Rohlman.



STAKEHOLDER MEETING ON ATHLETIC TRAINING WORKFORCE ISSUES JUNE 21, 2023 REPORT

INFORMATIONAL ITEMS.

- 1. **Meeting purpose, objectives, and structure**. Industry and membership stakeholders in athletic training, including meeting participants from the National Athletic Trainers' Association, the Board of Certification, the Commission on Accreditation of Athletic Training Education and the NCAA shared information and discussed the collegiate athletic training workforce, which is of increasing interest and concern to the NCAA membership. The meeting was held in conjunction with the annual meeting of the National Athletic Trainers' Association in Indianapolis, Indiana and was hosted by the NATA.
- 2. Workforce implications of athletic training credentialing and credential holders. Meeting participants discussed if and how athletic training credentialing and the number of credential holders may be impacting athletic training shortages in the collegiate athletic setting. It was noted that the number of "ATC" credential holders is consistent with historical trends, and there is no indication of a decline in the total number of certified athletic trainers. Approximately 16% of certified ATs work in the collegiate setting, which has for years been one of the three most frequent practice settings. In recent years, there has been an increase in the number of athletic training practice settings, including the military, corporate/industrial, occupational health, physician practice settings and performing arts, and all are seeing increases in the number of ATs practicing in those settings. Meeting participants agreed that there has been a dispersion of ATs across more practice settings, but not a reduction in the total number of credentialed ATs.
- 3. **Workforce implications of athletic training education**. Meeting participants discussed the system of athletic training education and noted what may be relevant to workforce issues.
 - a. **Professional degree change**. Meeting participants discussed recent changes to the athletic training professional degree level. Specifically, in health professions education, the *professional degree* is the degree level at which a student achieves the requisite knowledge and skills required to enter the profession. Confirmation that the student has achieved the requisite knowledge and skills is typically demonstrated by challenging a credentialing examination.

Historically, the athletic training professional degree was at the baccalaureate level. In 2015, the professional degree was elevated to the master's degree level, a change that reflected the profession's assessment of the clinical practice requirements of current and future ATs in a changing healthcare environment. A strong foundation of health-related basic sciences is necessary to prepare students for contemporary athletic training clinical practice. Additional justification for the degree change included:

- (1) Improved quality of clinical care.
- (2) Attracting students who have made a more intentional commitment to the AT profession, and who are less likely to be lost to other health professions at the post-baccalaureate level.
- (3) A more mature system of professional education that is aligned with those of peer health professions, including physical therapy, occupational therapy, physician associates, nurse practitioners, and clinical nurse specialists.
- b. Athletic training graduate assistantships. Meeting participants discussed the impact the recent professional degree level change had on athletic training graduate assistantships. Specifically, a byproduct of the professional degree change was the loss of graduate assistant athletic trainers, many of whom bolstered the full-time athletic training staffs of NCAA member schools. While a disruption of the graduate assistantship system was not a primary justification for the professional degree change, the profession recognized that graduate assistantships created several problems:
 - The graduate degrees pursued by students were frequently outside of the athletic training discipline and made only limited contributions to an "advanced" body of athletic training clinical knowledge and skill.
 - The presence of AT graduate assistantships distorted the athletic health care marketplace and devalued, both in real and perceived terms, the value of the collegiate AT. Arguably, many of the current athletic training collegiate workforce issues are the consequence of this distorted market dynamic, and solutions will likely require a re-balancing of that marketplace.

Meeting participants agreed that the athletic training profession believes that a restoration of the graduate assistantship system is not in the best interest of the profession, student-athletes, or its system of education for many reasons, including: a restoration of the graduate assistantship system would require a repeal of recent professional degree changes; and the athletic training profession has no appetite for reconsidering the professional degree level and considers the move to a master's-level professional degree to be final.

c. Production capacity of the system of athletic training education. Meeting participants discussed the production capacity of the athletic training education system. Currently, there are 278 professional athletic training education programs, including both the remaining baccalaureate-level (n = 37) and master's-level programs (n = 241). Recent declines in matriculating and graduating students are attributed to the pandemic, and similar declines have been observed in peer health

professions. It was noted that these declines are subsiding. And while the number of baccalaureate-level matriculants has steeply declined, this was expected, and is offset by steep increases in graduate-level matriculants. Emerging evidence is also emerging that students graduating from graduate-level programs are remaining in the profession and not being lost to other health professions.

Meeting participants agreed that there is no existing evidence of a decline in the production capacity of the athletic training education system.

4. **The state of the athletic training collegiate workforce.** Meeting participants discussed information about the attitudes, perceptions, and trends of the national athletic training workforce as collected from a survey of collegiate ATs conducted by the National Athletic Trainers' Association.

In recent years, athletic training clinical practice in the collegiate settings has increasingly prioritized 1-on-1 patient care, reflecting a growing understanding of the importance of assessing and treating movement dysfunction and the provision of manual therapy. These clinical trends contribute to a more time-intensive clinical environment. The more time-intensive clinical demands are compounded by growing policy obligations and administrative expectations for AT staff. The net effect is that athletic training practice in the collegiate setting is more time consuming than it used to be, and different than athletic training practice in other practice settings.

The meeting participants also noted that the "Great Resignation" affected health care workers across medical disciplines and clinical practice setting, and athletic training was no exception. Additionally, the collegiate setting has been uniquely susceptible to turnover, with general estimates suggesting 48% turnover of all positions in the collegiate athletic setting in the past two years. For collegiate athletic training, the meeting participant noted this trend is aggravated by:

- <u>Compensation</u>: rate of salary increases for collegiate ATs is less than the average increase across all athletic training practice settings and ranks second-to-last of all athletic training practice settings. (*Source: NATA Salary Survey*)
- <u>Culture</u>: the culture of collegiate athletic setting often challenges the provision of patient-centered care and independent medical decision-making, which increases AT frustration and threatens the quality of patient care.
- <u>Value</u>: ATs perceive limited philosophical and financial support from athletic administrators. These perceptions are reinforced by comparisons to the much higher salaries of less-educated athletic staff with job responsibilities that are less critical to student-athlete wellbeing.

- <u>Burnout</u>: Previously stated factors, combined with the pandemic, insufficient staffing and sometimes hostile work environments have increased rates of athletic trainer burnout, which has led to departures. Student athletic trainers exposed to this kind of practice environment also may become less willing to accept collegiate job offers.
- <u>Demographic changes</u>. The demographics of the athletic training workforce are also changing. Most athletic trainers are now women (57%), and 70% of active ATs are 40 years of age or younger. Together with the generational priorities of today's students, these demographic changes suggest different beliefs and priorities about work and work-life balance. Where these beliefs and priorities are at odds with the realities of the collegiate athletic training practice setting, ATs are leaving the setting.
- <u>Benefits and recruitment</u>. Simultaneously, trends in athletic training workplace benefits are changing and further incentivizing AT migration into other practice settings. For example, an increased number of ATs working outside of the collegiate environment are reporting increased salaries and enhanced employment benefits, such as sign-on bonuses and moving expenses. Until recently, these kinds of workplace benefits have rarely been seen in athletic training workplace recruitment and retention tactics. Their absence in the collegiate setting represents additional obstacles to the recruitment and retention of ATs.
- 5. **Ideas for addressing athletic training collegiate workforce issues.** Meeting participants shared and discussed the following ideas:
 - **(re)Assess the culture of athletic health care delivery**. Meeting participants agreed that this is best accomplished locally and to account for regional market differences. Cultural factors that may be assessed can include, but are not limited to:
 - AT patient loads and volumes.
 - AT to student-athlete patient ratios: emerging evidence suggests that both injury rates and return to play times can be impacted by this factor.
 - Tolerance for medicolegal risks, including documentation quality and compliance.
 - Awareness of, and respect for, independent medical care principles and accountability for those principles.
 - Support for family and personal obligations.

• (re)Assess athletic trainer value. Meeting participants agreed that consulting with human resources on the performance of an AT compensation analysis, preferably benchmarking AT responsibilities and time demands against the local allied health / medical market may be helpful. Prior to a compensation analysis, athletic training job descriptions should be reviewed to ensure they reflect current role expectations and responsibilities.

Attention should be given to the actual value that athletic training services contribute to maintaining a student-athlete's ability to participate in athletics, which has significant implications for student recruitment and retention, especially in Division III schools. Additionally, efforts to assess athletic trainer value may also attempt to account for the foundational contribution that ATs make to the student-athlete experience. As noted by adoption of the new NCAA Constitution, the work of the NCAA Division I Transformation Committee and others, elevating and transforming the student-athlete experience is a top-priority of the Association and some accounting of the ATs role and contribution to that experience may be appropriate.

The identification of various forms of alternative compensation complementary to actual salary might be helpful to a school's AT recruitment and/or retention efforts, depending on local market trends.

Lastly meeting participants urged that going forward, the sources of athletic trainer salary data be enhanced to better account for local market variability, and if possible, include benchmarking information about what AT salaries should be, rather than just reporting on current salary levels.

• **Stakeholder engagement**. Because school presidents and chancellors often have final say in personnel decisions, meeting participants agreed that discussions about the current athletic training workplace challenges and potential remedies should occur with school presidents and chancellors. Presidents and chancellors may be sufficiently removed from these athletic department personnel dynamics and could be otherwise unaware of their impact on factors such as the quality of athletic healthcare, medicolegal exposure, and student recruitment and retention.

Meeting participants also felt that engagement with school risk managers could be helpful for properly assessing the role and contributions that athletic trainers make to the school's risk minimization strategy.

Meeting participants agreed that any resources that might facilitate these stakeholder conversations would be useful.

• Alternative models of athletic health care delivery. Meeting participants acknowledged that several different models now exist for the provision of athletic health care services to collegiate student-athletes. The traditional model is one where athletic health care providers are employed directly by the athletic department. However, various alternative models now exist, and may offer various opportunities and/or advantages, both financial and otherwise. While no single model can yet be recommended, schools might consider exploring one or more of these alternative care delivery models.

Stakeholder Meeting on Athletic Training Workforce Issues		
June 21, 2023 Meeting		
Attendees:		
Stevie Baker-Watson, DePauw University, DIII		
Brant Berkstresser, NATA Intercollegiate Council for Sports Medicine Chair		
Mary-Beth Cooper, Springfield College, DIII		
Kathy Dieringer, NATA President (Co-Chair)		
A.J. Duffy, NATA President-Elect		
Glory Fung, Concordia University Irvine, DII		
David Harris, University of Northern Iowa, DI		
Steve Hillmer, University of Wisconsin-Whitewater, DIII		
Tamesha Logan, NATA Associate Executive Director		
Christopher May, Saint Louis University, DI		
Anne Minton, BOC Chief Executive Officer		
Jennifer O'Donoghue, Intercollegiate Council for Sports Medicine, DI		
Nicole Pieart, Lake Forest College, DIII (Co-Chair)		
Rene Revis Shingles, BOC President		
Julie Rochester, Northern Michigan University, DII		
Dave Saddler, NATA Executive Director		
Eric Sauers, CAATE President		
Trent Stratton, Kent State University, DI		
Toni Torres-McGehee, CAATE President-Elect		
Dale West, CAATE Executive Director		
Absentees:		
Michelle Menard, Palm Beach Atlantic University, DII		
Guests in Attendance:		
None.		
Other NCAA Staff Members in Attendance:		
Amanda Conklin, LaGwyn Durden, Alicia Fine, Brian Hainline, Maritza Jones, John Parsons,		
Alex Purcell and Bill Regan.		



NCAA COMMITTEE ON COMPETITIVE SAFEGUARDS AND MEDICAL ASPECTS OF SPORTS STATEMENT ON WORKFORCE ISSUES IN COLLEGIATE ATHLETIC TRAINING

In June, the NCAA Committee on Competitive Safeguards and Medical Aspects of Sports co-lead <u>a</u> <u>meeting</u> with industry and membership stakeholders in athletic training, the purpose of which was to share information and discuss the collegiate athletic training workforce and related issues of interest and concern to the NCAA membership.

CSMAS recognizes the significant impact athletic trainers have on the student-athlete experience, perhaps second only to coaches. In addition to responding to athletic emergencies, traumas, and treating athletic injuries and illness, athletic trainers have also become frontline providers on mental health issues. Beyond these clinical services, ATs also serve as designated athletics health care administrators in more than 60% of member schools. AHCAs are central to on-campus athletic health care administration and policy and are the primary conduit from the NCAA national office to campus athletic health care providers. Volatility in the AT workforce; therefore, may challenge the continuity of both the administration and delivery of athletic health care.

CSMAS seeks to highlight and amplify several themes from the June meeting:

- 1. The national AT workforce is not smaller and the capacity of the AT profession to produce adequate numbers of ATs is currently unchanged. While recent changes in the AT professional degree may eventually impact production capacity, there is no evidence to suggest that is currently the case. CSMAS will remain engaged with AT organizations to monitor these trends over time.
- 2. The type of available work settings for ATs is rapidly expanding and this is placing competitive pressures on the collegiate work setting. Opportunities in work settings, such as industrial companies, military organizations, and physician offices, are rapidly expanding for ATs. While the total AT workforce is the same, the collegiate setting now competes with other, often more attractive, work settings.
- 3. The COVID-19 pandemic had a broad and deleterious effect on the national healthcare workforce and the "great resignation" was especially acute amongst healthcare providers. ATs are healthcare providers and were not spared from this impact. Most AT workloads increased disproportionately during the pandemic. This increase caused burnout, which caused many ATs to leave the profession or the collegiate space.
- 4. Shortages in the AT workforce are setting-specific and suggest that in the competition with other employment settings for ATs, colleges and universities are losing. Competitive variables include traditional employment factors, such as salary, schedules, and culture. Other settings are addressing these issues more effectively and are attracting ATs away from the collegiate setting. For decades, the graduate assistantship model on which many schools relied to secure AT services, distorted the athletic health care marketplace and devalued the value of the collegiate AT. Arguably, many of the current athletic training collegiate workforce issues are the consequence of this distorted market dynamic and solutions will likely require a re-balancing.

5. While all divisions appear to be challenged with this issue, there are likely divisional and school differences in the impact of local shortages in AT availability. Therefore, solutions will likely be local in nature, and there is no single solution and especially not one that can be effectuated by the NCAA national office. Divisions, conferences and individual schools must assess their unique factors and customize their solutions.

CSMAS notes three strategies / solutions for membership consideration:

- 1. **President/chancellor engagement is critical.** This has been the most common sentiment expressed by both membership and AT stakeholders. It reflects the reality that presidents / chancellors are often the gatekeepers to campus hiring, budget and resource decisions. It is especially important that presidents and chancellors are involved in any operational and/or risk assessment arising from campus AT shortages.
- 2. Basic recruitment and retention strategies, in coordination with human resources, should be used to re-assess and, if necessary, recalibrate AT positions. The goal is to align collegiate AT positions with the national and regional salary averages for health care professionals. As noted above, other employment factors, such as work schedules, support and culture may also be considered. AT industry stakeholders (e.g., the National Athletic Trainers' Association) may also provide resources to inform such deliberations. These efforts may help bolster schools' recruitment and retention efforts and make them more effective in the national competition for AT services.
- 3. Alternative employment and administrative models. Not all member schools use the traditional model of athletic health care delivery, where athletic health care providers are employed directly by the athletic department. Alternative models do exist and may be effective for addressing a host of issues, including AT recruitment and retention and important Association policy requirements, such as independent medical care. The committee is committed to learning more about these models and assisting the membership in its understanding of them.

Moving forward toward a solution must begin with a shared understanding of the relevant professional and market dynamics. We encourage all campus stakeholders to closely review the <u>meeting report</u> and this statement and to share these documents with presidents, chancellors, human resource and risk-management offices and conference offices. CSMAS commits to continuing to monitor this situation with its athletic training partners and to understanding emerging athletic health care services and employment models and the role they may play in addressing this issue.



Updated September 2023

Below is a checklist* that will help the athletics health care administrator ensure that the member school's concussion safety protocol is compliant with the Concussion Safety Protocol Legislation. This checklist, which has been recommended by the NCAA Concussion Safety Advisory Group and prescribed by the NCAA Committee on Competitive Safeguards and Medical Aspects of Sport, provides a foundation for member school concussion safety protocols that are important to clinicians and stakeholders who manage concussion and head injury in collegiate athletes. The checklist is not intended as a clinical practice guideline or legal standard of care and should not be interpreted as such. This checklist serves as a guide and, as such, is of a general nature, consistent with the reasonable practice of the healthcare professional. Individual treatment will depend on the facts and circumstances specific to each individual case.

Please do not hesitate to reach out to the NCAA Sport Science Institute at <u>ssi@ncaa.org</u> if you have any questions or concerns.

*Highlighted content represents an update from the prior checklist.

Concussion Definition:

According to the *Consensus statement on concussion in sport: the 6th International Conference on* Concussion in Sport – Amsterdam, October 2022:

Sport-related concussion is a traumatic brain injury caused by a direct blow to the head, neck or body resulting in an impulsive force being transmitted to the brain that occurs in sports and exercise-related activities. This initiates a neurotransmitter and metabolic cascade, with possible axonal injury, blood flow change and inflammation affecting the brain. Symptoms and signs may present immediately, or evolve over minutes or hours, and commonly resolve within days, but may be prolonged.

No abnormality is seen on standard structural neuroimaging studies (computed tomography or magnetic resonance imaging T1- and T2-weighted images), but in the research setting, abnormalities may be present on functional, blood flow or metabolic imaging studies. Sport-related concussion results in a range of clinical symptoms and signs that may or may not involve loss of consciousness. The clinical symptoms and signs of concussion cannot be explained solely by (but may occur concomitantly with) drug, alcohol, or medication use, other injuries (such as cervical injuries, peripheral vestibular dysfunction) or other comorbidities (such as psychological factors or coexisting medical conditions).

Pre-Season Education:

Education management plan that specifies:

Institution has provided and allowed an opportunity to discuss concussion education
material (e.g., NCAA concussion education fact sheet) or other applicable material annually
to the following parties:

Student-athletes.





- Athletic trainers.
- Directors of athletics.
- Other personnel involved in student-athlete health and safety decision making.
- Each party provides a signed acknowledgement of having reviewed and understood the concussion material.

Pre-Participation Assessment:

Pre-participation management plan that specifies:

Documentation that each NCAA student-athlete has received a pre-participation baseline concussion assessment* at the member institution that addresses:

- History of concussion or brain injury, neurologic disorder, and mental health symptoms and disorders.
- Symptom evaluation.
- Cognitive assessment.
- Balance evaluation.
- Team physician determines pre-participation clearance and/or the need for additional consultation or testing. ******

*Baseline testing may inform post-injury evaluation; however, student-athletes who have suffered a concussion may perform at the same level or even better than their baseline testing, as motivation and other factors may differ in post-concussion testing. Ultimately, baseline testing serves as one of many potential factors in making a clinical decision.

******Consider a new baseline concussion assessment six months or beyond for any NCAA student-athlete with a documented concussion, especially those with complicated or multiple concussion history.

Recognition and Diagnosis of Concussion:

Recognition and diagnosis of concussion management plan that specifies:

Medical personnel with training in the diagnosis, treatment and initial management of acute concussion must be "present" at all NCAA competitions in the following contact/collision sports: acrobatics and tumbling; Alpine skiing; baseball; basketball; beach volleyball; diving; equestrian; field hockey; football; gymnastics; ice hockey; lacrosse; pole vault; rugby; soccer; softball; volleyball; water polo; wrestling. To be present means to be on site at the campus or arena of the competition. Medical personnel may be from either team or may be independently contracted for the event.

Medical personnel with training in the diagnosis, treatment and initial management of acute concussion must be "available" at all NCAA practices in the following contact/collision sports: acrobatics and tumbling; Alpine skiing; baseball; basketball; beach volleyball; diving; equestrian; field hockey; football; gymnastics; ice hockey; lacrosse; pole vault; rugby; soccer; softball; volleyball; water polo; wrestling. To be available means that, at a minimum, medical personnel can be contacted at any time during the practice via telephone, messaging, email, beeper or other immediate communication means. Further, the case can be discussed through such communication, and immediate arrangements can be made for the athlete to be evaluated.

Any student-athlete with signs/symptoms/behaviors consistent with concussion:

Must be removed from practice or competition for evaluation.

- Signs that warrant immediate removal from the field include: actual or suspected loss of consciousness, seizure, tonic posturing, ataxia, poor balance, confusion, behavioral changes and amnesia.
- Evaluation must be by an athletic trainer or team physician (or physician designee) with concussion experience.
- Allow ample time (up to 10-15 minutes) when conducting a multimodal screen (e.g., SCAT6) to evaluate a potential concussion.
- Must be removed from practice/play for that calendar day if concussion is confirmed or suspected.
- May only return to play the same day if concussion is no longer suspected after evaluation*.

**Even in such cases, consider next day follow-up assessment because initial symptoms may evolve over hours.*

Initial Suspected Concussion Evaluation:

Initial suspected concussion evaluation management plan that specifies:		
Immediate assessment/neurological screen for 'red flags' or observable signs (as noted in the Concussion Emergency Action Plan below)		
A multi-modal evaluation, as clinically indicated, which may include:		
	Clinical assessment for cervical spine trauma, skull fracture, intracranial bleed or other catastrophic injury.	
	Symptom assessment.	
	Physical and neurological exam.	
	Cognitive assessment.	
	Balance exam.	

Concussion Emergency Action Plan:

A Concussion Emergency Action Plan includes:		
Immediate removal from play and assessment for possible transport to a local		
hospital/trauma center when any of the following are present:		
• Neck pain or tenderness.		
• Seizure or convulsion.		
• Double vision.		
• Loss of consciousness.		
• Weakness or tingling/burning in more than one arm or in the legs.		
Deteriorating conscious state.		
• Vomiting.		
• Severe or increasing headache.		
• Increasingly restless, agitated or combative Glascow Coma Scale Score		
< <u>15.</u>		
Visible deformity of the skull.		

Off-Field Same-Day and up to Three-Day Post-Concussion Management:

Mechanism for serial evaluation and monitoring following injury same day and up to 72 hours (see Return-to-Learn and Return-to-Play below).

Documentation that post-concussion plan of care was communicated to both studentathlete and another adult responsible for the student-athlete, in oral and/or written form.

Subacute (72 hours to weeks postinjury) Management Plan:

Mechanism for evaluation and monitoring of the following:

- Symptom evaluation.
- Immediate and delayed memory.
- Concentration.
- Orthostatic vital signs.
- Cervical spine assessment.
- Neurological evaluation.
- Balance and tandem gait assessment.
- Modified VOMS.

Consider further evaluation, as clinically indicated:

- Screen for fear, anxiety or depression or other mental health issues.
- Screen for sleep disturbance.
- Graded aerobic exercise testing.

Rest and Exercise:

Symptom-limited, light aerobic physical activity can begin within 24-48 hours (e.g., walking).

Reduced screen use as necessary in the first 48 hours after injury.

Re-Evaluation Plan:

Re-evaluation by a physician for a student-athlete with atypical presentation or persist<mark>ing</mark> symptoms > 4 weeks in order to consider additional diagnoses, * best management options, and consideration of referral.

*Additional diagnoses include, but are not limited to:

- Fatigue and/or sleep disorder.
- Migraine or other headache disorders.
- Mental health symptoms and disorders.
- Ocular dysfunction.
- *Cervical and vestibular dysfunction.*
- Cognitive impairment.
- *Autonomic dysfunction, including orthostatic intolerance and postural orthostatic tachycardia syndrome.*

• Pain.

Return-to-Learn:

<u>The vast majority of young adults have a full return-to-learn with no additional academic support</u> <u>by 10 days post-injury.</u>

Return-to-learn management plan should specify:



Identification of a point person within athletics who will navigate return-to-learn with the student-athlete.

Avoid complete rest and isolation, even for initial 24-48 hours.

Identification of a multi-disciplinary team* that will navigate more complex cases of prolonged return-to-learn:

**Multi-disciplinary team may include, but not be limited to:*

- Team physician.
- Athletic trainer.
- *Psychologist/counselor.*
- Neuropsychologist consultant.
- Faculty athletics representative.
- Academic counselor.
- Course instructor(s).
- College administrators.
- Office of disability services representatives.
- Coaches.

Individualized initial plan that includes return to classroom/studying as tolerated. The plan may address environment, physical, curriculum and/or testing adjustments.

Re-evaluation by team physician (or their designee) if concussion symptoms worsen with academic challenges.

Modification of schedule/academic accommodations, as indicated, with help from the identified point-person.		
Re-evaluation by team physician and members of the multi-disciplinary team, as appropriate, for student-athlete with atypical presentation or persistent symptoms lasting longer than two weeks.		
Engaging campus resources for cases that cannot be managed through schedule modification/academic accommodations.		
Such campus resources must be consistent with ADAAA, and include at least one of the following:		
Learning specialists.		
Office of disability services.		
ADAAA office.		

Return-to-Sport:

Return-to-Sport management plan that specifies:



Final determination of unrestricted return-to-sport is from the team physician or medically qualified physician designee.

Each NCAA student-athlete with concussion must undergo a supervised stepwise
progression* management plan by a health care provider with expertise in concussion
that specifies:

Step 2: Aerobic exercise with light resistance training as tolerated (no more than mild⁺ or brief⁺⁺ exacerbation of symptoms).

2a: Light (up to approximately 55% maximum heart rate); then 2b: Moderate (up to approximately 70% maximum heart rate).

Step 3: Individual sport-specific exercise and activity without any risk of inadvertent head-impact exposure.

Proceed to Step 4 only after resolution of signs and symptoms related to the current concussion, including with and after physical exertion.

- **Step 4:** Non-contact practice with progressive resistance training.
- **Step 5:** Unrestricted practice or training.
- Step 6: Unrestricted return-to-sport. **

*It is typical for each step to $be \ge 24$ hours.

***Unrestricted return-to-sport should not occur prior to unrestricted return-to-learn for injuries occurring while the athlete is enrolled in classes.*

⁺Mild is defined as an increase of no more than 2 points on a 0-10 point scale when compared with the pre-exercise resting value.

⁺⁺Brief is defined as less than one hour.

Reducing Head Impact Exposure:

Reducing head impact exposure in a manner consistent with *Interassociation Recommendations: Preventing Catastrophic Injury and Death in Collegiate Athletes* and *Consensus statement on concussion in sport: the 6th International Conference on Concussion in Sport – Amsterdam, October 2022.* For example:

- All practices and competitions adhere to existing ethical standards.
- Using playing or protective equipment (including the helmet) as a weapon is prohibited during all practices and competitions.
- In all practices and competitions, deliberately inflicting injury on another player is prohibited.
- All playing and protective equipment (including helmets), as applicable, meet relevant equipment safety standards and related certification requirements.
- All contact/collision, helmeted practices and competitions adhere to keeping the head out of blocking and tackling.
- Emphasizing education of proper technique to reduce head impact exposure for all contact and collision sports, with a special emphasis in the pre-season.
- Limit the number and duration of contact and collision in practices, intensity of contact in practices, and promote strategies restricting collision time in practices in contact-collision sports.
- Adherence to policy and rules in sport that reduce collisions.
- Consideration of participation in neuromuscular training warm-up programs.



Concussion Safety Protocol Template

The following template is designed as an aid for NCAA schools to consider using in order to satisfy NCAA Divisions I, II and III concussion safety protocol legislation. The template highlights all components of the updated NCAA Concussion Safety Protocol Checklist and provides shaded cells that schools may use to personalize their protocol. The NCAA Concussion Safety Advisory Group recommended modifications to the prior Concussion Safety Protocol Checklist, and these recommendations were prescribed by the NCAA Committee on Competitive Safeguards and Medical Aspects of Sports. The updated Checklist items are highlighted so that the prior Concussion Safety Protocol Template can be modified more easily. Template content that is outside the scope of the Checklist has been indicated with an asterisk (*) and is included for your convenience and consideration. A signature line for the athletics health care administrator is included in the template. Additional signature lines may be personalized based on the requirements of a school or conference office.

Schools are not required to use the template; rather, it is offered as a resource to support athletic departments in their concussion safety efforts. The content of this template is offered for educational purposes only and is not intended to constitute, or be a substitute for, medical or legal advice. The content is not intended to be exhaustive, and we encourage membership to review these materials with applicable campus medical, legal and risk management authorities to determine whether and how best to use this information to address individual institutional risks and requirements. All concussion safety protocols, regardless if developed using the template or another mechanism, must be consistent with all applicable divisional legislative requirements.

Highlighted content represents an update from the prior template.

School Name

Concussion Safety Protocol

School Name Concussion Safety Protocol

Introduction

School Name is committed to protecting the health of and providing a safe environment for each of its participating NCAA student-athletes. To this end, and in accordance with NCAA legislation, School Name has adopted the following Concussion Safety Protocol for all NCAA student-athletes. This protocol identifies expectations for institutional concussion management practices as they relate to (1) the definition of sport-related concussion*; (2) independent medical care*; (3) preseason education; (4) preparticipation assessment; (5) recognition and diagnosis; (6) initial suspected concussion evaluation; (7) post-concussion management; (8) return-to-learn management; (9) return-to-sport management; (10) reducing head impact exposure; and (11) written certificate of compliance signed by the athletics health care administrator.

1. Definition of Sport-Related Concussion*

There is no uniform definition of concussion. The Consensus Statement on Concussion in Sport, which resulted from the 6th international conference on concussion in sport, defines sport-related concussion as follows:

Sport-related concussion is a traumatic brain injury caused by a direct blow to the head, neck or body resulting in an impulsive force being transmitted to the brain that occurs in sports and exercise-related activities. This initiates a neurotransmitter and metabolic cascade, with possible axonal injury, blood flow change and inflammation affecting the brain. Symptoms and signs may present immediately, or evolve over minutes or hours, and commonly resolve within days, but may be prolonged.

No abnormality is seen on standard structural neuroimaging studies (computed tomography or magnetic resonance imaging T1- and T2-weighted images), but in the research setting, abnormalities may be present on functional, blood flow or metabolic imaging studies. Sport-related concussion results in a range of clinical symptoms and signs that may or may not involve loss of consciousness. The clinical symptoms and signs of concussion cannot be explained solely by (but may occur concomitantly with) drug, alcohol, or medication use, other injuries (such as cervical injuries, peripheral vestibular dysfunction) or other comorbidities (such as psychological factors or coexisting medical conditions).

2. Independent Medical Care*

As required by NCAA Independent Medical Care legislation, team physicians and athletic trainers shall have unchallengeable autonomous authority to determine medical management and return-to-activity decisions, including those pertaining to concussion and head trauma injuries, for all student-athletes.

3. Preseason Education

All NCAA student-athletes will be provided and allowed an opportunity to discuss concussion educational material (e.g., the NCAA Concussion Education Fact Sheet) or other applicable material and will be required to sign an acknowledgement, on an annual basis and prior to participation, that they have been provided, reviewed and understood the concussion education material.

All coaches, team physicians, athletic trainers, directors of athletics and other personnel involved in NCAA student-athlete health and safety decision making will be provided and allowed an opportunity to discuss educational material (e.g., the NCAA Concussion Education Fact Sheet) or other applicable material and will be

required to sign an acknowledgement, on an annual basis, that they have been provided, reviewed and understood the concussion education material.

4. Pre-Participation Assessment

All NCAA student-athletes will undergo a pre-participation baseline concussion assessment. This assessment assumed individualized medical care, which means: Each athlete and each injury are different. Depending on the severity of prior injuries, the number of concussions, other individual concerns and based on the developing state of science, the team physician/primary health care provider should review each athlete's history and consider discussing with the student-athlete concerns about concussion and repetitive head impact as warranted, including potential risks and benefits from playing sport. Such discussion allows the athlete to make an informed decision about their participation in sport.

This pre-participation assessment will be conducted at School Name and, at a minimum, will include assessment for the following:

- History of concussion or brain injury, neurologic disorder, and mental health symptoms and disorders.
- Symptom evaluation. (Identify tool to be used, e.g., Symptom evaluation in SCAT6)
- Cognitive assessment. (Identify and describe, e.g., ImPACT, Axon, paper and pencil)
- Balance evaluation. (Identify and describe, e.g., BESS, modified BESS, SCAT6, other)

The team physician will determine pre-participation clearance and/or the need for additional consultation or testing and will consider a new baseline concussion assessment at six months or beyond for any NCAA student-athlete with a documented concussion, especially those with complicated or multiple concussion history. Importantly, baseline testing may inform post-injury evaluation; however, student-athletes who have suffered a concussion may perform at the same level or even better than their baseline testing, as motivation and other factors may differ in post-concussion testing. Ultimately, baseline testing serves as one of many potential factors in making a clinical decision.

5. Recognition and Diagnosis of Concussion

Medical personnel with training in the diagnosis, treatment and initial management of acute concussion must be present at all NCAA competitions in the following contact/collision sports: (list all sports that your institution sponsors from the following: acrobatics and tumbling; Alpine skiing; baseball; basketball; beach volleyball; diving; equestrian; field hockey; football; gymnastics; ice hockey; lacrosse; pole vault; rugby; soccer; softball; volleyball; water polo; wrestling).

NOTE: To be present means to be on site at the campus or arena of the competition. Medical personnel may be from either team or may be independently contracted for the event.

Medical personnel with training in the diagnosis, treatment and initial management of acute concussion must be available at all NCAA practices in the following contact/collision sports: (list all sports that your institution sponsors from the following: acrobatics and tumbling; Alpine skiing; baseball; basketball; beach volleyball; diving; equestrian; field hockey; football; gymnastics; ice hockey; lacrosse; pole vault; rugby; soccer; softball; volleyball; water polo; wrestling).

NOTE: To be available means that, at a minimum, medical personnel can be contacted at any time during the practice via telephone, messaging, email, beeper or other immediate communication means and that the case can be discussed through such communication, and immediate arrangements can be made for the athlete to be evaluated.

Any NCAA student-athlete that exhibits signs, symptoms or behaviors consistent with concussion must be removed from practice or competition for evaluation. Examples of signs that warrant <u>immediate</u> removal from the field include: actual or suspected loss of consciousness, seizure, tonic posturing, ataxia, poor balance, confusion, behavioral changes, amnesia).

Concussion evaluation:

- Must be evaluated by an athletic trainer or team physician (or physician designee) with concussion experience.
- Allow ample time (e.g., 10-15 minutes) when conducting a multi-modal screen (e.g., SCAT6) to evaluate a potential concussion.
- Must be removed from practice/play for that calendar day if concussion is confirmed or suspected.
- May only return to play the same day if the athletic trainer, team physician or physician designee determines that concussion is no longer suspected after evaluation. Even in such cases, consider next day follow-up assessment because initial symptoms may not appear for several hours.

6. Initial Suspected Concussion Evaluation

The initial concussion evaluation must include an immediate assessment/neurological screen for "red flags" or observable signs (as noted in the

Concussion Emergency Action Plan below). The assessment may include a multimodal evaluation as clinically indicated such as:

- Clinical assessment to rule out cervical spine trauma, skull fracture, intracranial bleed or other catastrophic injury.
- Symptom assessment. (Identify the name of the tool)
- Physical and neurological exam. (Identify by name any additional special tests, such as King-Devick, Visual Ocular Motor Screen, etc.)
- Cognitive assessment. (Identify the name of the tool)
- Balance exam. (Identify the name of the tool)

A Concussion Emergency Action Plan should be in place and include:

A student-athlete must be immediately removed from play and assessed for possible transport to a local hospital/trauma center when any of the following signs/symptoms/behaviors are present:

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

7. Post-concussion Management

For all cases of diagnosed concussion, there must be documentation that postconcussion plan of care was communicated to both the student-athlete and another adult responsible for the student-athlete, in oral and/or written form. Because symptoms may evolve or manifest over time, for all suspected or diagnosed concussions, there will be in place a mechanism for serial evaluation of the studentathlete off-field the same day and up to 72 hours.

There should be in place a subacute (three days to weeks post-injury) management plan that includes a mechanism for evaluation and monitoring of the following:

• Symptom evaluation.

- Immediate and delayed memory.
- Concentration.
- Orthostatic vital signs.
- Cervical spine assessment.
- Neurological evaluation.
- Balance and tandem gait assessment.
- Modified VOMS.

In addition, the subacute management plan may consider* evaluating for the following, as clinically indicated:

- Screen for fear, anxiety or depression or other mental health issues.
- Screen for sleep disturbance.
- Graded aerobic exercise testing.

*Evaluation tools, such as the recently released SCOAT6 may be helpful in providing a standardized framework from which a clinical, office-based evaluation can be conducted, especially for school athletic health care settings in which physicians are not embedded.

For all concussion management plans:

Consideration of symptom-limited, light aerobic physical activity within 24-48 hours (e.g., walking).

Consideration of reduced screen use in the first 48 hours after injury.

Re-Evaluation:

Any NCAA student-athlete with atypical presentation or persisting symptoms > 4 weeks will be re-evaluated by a physician in order to consider additional diagnoses, best management options, and consideration of referral. Additional diagnoses include but are not limited to: fatigue and/or sleep disorder; migraine or other headache disorders; mental health symptoms and disorders; ocular dysfunction; cervical and vestibular dysfunction; cognitive impairment and autonomic dysfunction including orthostatic intolerance and postural orthostatic tachycardia syndrome; pain.

8 Return-to-Learn Management

The vast majority of young adults have a full return-to-learn with no additional academic support by 10 days post-injury. Complete rest and isolation should be avoided, even during the initial 24-48 hours post-injury. Relative rest is important

in the first 24 hours. For those student-athletes with persisting symptoms a more formal plan may be in order.

The return-to-learn concept should follow an individualized and step-wise process overseen by a point person within the athletics department, who will navigate return-to-learn with the student-athlete and, in more complex cases of prolonged return-to-learn, work in conjunction with a multi-disciplinary team that may vary student-to-student depending on the specifics of the case but may include, but is not limited to:

(List all that apply.)

- Team physician.
- Athletic trainer.
- Psychologist/counselor. (Identify if student health services or department of athletics)
- Neuropsychologist.
- Medical specialists.
- Faculty athletics representative.
- Academic counselor.
- Course instructor(s).
- College administrators.
- Office of disability services representative.
- Coaches.

A student-athlete who has suffered a concussion will return to classroom/studying as tolerated with modification of schedule/academic accommodations, as indicated, with help from the identified point-person. The plan may address environment, physical, curriculum and/or testing adjustments. Campus resources will be engaged for cases that cannot be managed through schedule modification/academic accommodations. Campus resources will be consistent with the ADAAA and will include one of the following:

- Learning specialists.
- Office of disability services.
- ADAAA office.

A student-athlete will be re-evaluated by a team physician (or their designee) and members of the multi-disciplinary team, as appropriate, if concussion symptoms worsen with academic challenges or in the event of atypical presentation or persisting symptoms.

Concussion Safety Protocol Template Page 8

9. Return-to-Sport Management

Unrestricted return-to-sport should not occur prior to unrestricted return-to-learn for concussions diagnosed while the student-athlete is enrolled in classes. Complete rest and isolation should be avoided, even for initial 24-48 hours. Relative rest is important in the first 24 hours. Final determination of unrestricted return-to-sport will be made by a **School Name** team physician or their medically qualified designee following implementation of an individualized, supervised stepwise progression management plan that includes:

Step 1. Symptom-limited activities of daily living.

Step 2. Aerobic exercise with light resistance training as tolerated [no more than mild or brief (<1 hour) exacerbation of symptoms].

2a. Light (up to approximately 55% maximum heart rate); then

2b. Moderate (up to approximately 70% maximum heart rate).

Step 3. Individual sport-specific exercise and activity without any increased risk of inadvertent head impact exposure.

Proceed to step 4 only after resolution of signs and symptoms related to the current concussion, including with and after physical exertion.

Step 4. Non-contact practice with progressive resistance training.

Step 5. Unrestricted practice or training.

Step 6. Unrestricted return-to-sport.

The above stepwise progression will be supervised by a health care provider with expertise in concussion, with it being typical for each step in the progression to last at least 24 hours.

NOTE: If at any point the student-athlete becomes symptomatic (more symptomatic than baseline), the team physician or physician designee will be notified, and adjustments will be made to the return-to-sport progression. * For example, testing stops with an increase of more than 2 points on a 0 to 10 point scale when compared with the pre-exercise resting value.

10. Reducing Head Impact Exposure

School Name is committed to protecting the health of and providing a safe environment for each of its participating NCAA student-athletes. *To this end and in accordance with NCAA association-wide policy*, **School Name** *will reduce studentathlete head impact exposure in a manner consistent with Interassociation Recommendations: Preventing Catastrophic Injury and Death in Collegiate Athletes and Consensus statement on concussion in sport: the 6th International Conference on Concussion in Sport. For example:*

- School Name teams will adhere to existing ethical standards in all practices and competitions.
- Using playing or protective equipment (including the helmet) as a weapon will be prohibited during all practices and competitions.
- Deliberately inflicting injury on another player will be prohibited in all practices and competitions.
- All playing and protective equipment (including helmets), as applicable, will meet relevant equipment safety standards and related certification requirements.
- School Name will keep the head out of blocking and tackling in contact/collision, helmeted practices and competitions.
- School Name will emphasize education of proper technique to reduce head impact exposure for all contact and collision sports, with special emphasis in pre-season.
- School Name *will adhere to policies and rules in sport that limit the number and duration of contact practices and activities in contact-collision sports.*
- Consideration of participation in neuromuscular training warm-up programs.
- For ice hockey: it is recommended that all players wear a mouthguard.

Concussion Safety Protocol Template Page 10

Compliance Certification* Academic Year 2023-24

School Name

Concussion Management Plan

By signing and dating this form, I hereby acknowledge, on behalf of the institution identified above, that for the 2023-24 academic year, the attached **School Name** Concussion Safety Protocol is consistent with the NCAA Concussion Safety Protocol Checklist and otherwise fulfills the requirements of all applicable NCAA Concussion Management Plan legislation.

Required Signature		Optional Signature**	
Print Name:		Print Name:	
Sign:		Sign:	
Date: Click or tap to enter a date.		Date: Click or tap to enter a date.	
Optional Signature**		Optional Signature**	
Print Name: Click or tap here to enter text.		Print Name: Click or tap here to enter text.	
Sign:		Sign:	
Date: Click or tap to enter a date.	Date:	Click or tap to enter a date.	

** The form allows for additional optional signatures to accommodate conference or institutional signature requirements beyond the signature required by NCAA legislation.

WHAT STUDENT-ATHLETES NEED TO KNOW

Concussion Safety

What Is a Concussion?

The Consensus Statement on Concussion in Sport, which resulted from the sixth international conference, defines sport-related concussion as follows:

Sport-related concussion is a traumatic brain injury caused by a direct blow to the head, neck or body resulting in an impulsive force being transmitted to the brain that occurs in sports and exercise-related activities. This initiates a neurotransmitter and metabolic cascade, with possible axonal injury, blood flow change and inflammation affecting the brain. Symptoms and signs may present immediately, or evolve over minutes or hours, and commonly resolve within days, but may be prolonged.

Additional information on concussion diagnosis, management and prevention in collegiate athletes, including a complete definition of concussion, can be found here.



1. Know the symptoms.

- You may experience ...
- Headache or head pressure.
- Nausea.
- Balance problems or dizziness.
- Double or blurry vision.
- Sensitivity to light or noise.
- · Feeling sluggish, hazy or foggy.
- · Confusion, concentration or memory problems.

2. Speak up.

• If you think you have a concussion, stop playing and talk to your coach, athletic trainer or team physician immediately.

3. Take time to recover.

- Follow your team physician and athletic trainer's directions during concussion recovery.
- When managed properly, most student-athletes recover fully from concussion. Exercise, under medical supervision, is a core component of concussion management.
- There may be negative consequences when concussion is left untreated.
- Once you've recovered from a concussion, talk with your physician about the risks and benefits of continuing to participate in your sport.

How Can I Be a Good Teammate?

1. Know the signs.

You may notice that a teammate ...

- Appears dazed or stunned.
- Forgets an instruction.
- Is confused about an assignment or position.
- · Is unsure of the game, score or opponent.
- Appears less coordinated, unsteady on feet or wobbly.
- Answers questions slowly.
- Loses consciousness.

2. Encourage teammates to be safe.

• If you think one of your teammates has a concussion, tell your coach, athletic trainer or team physician immediately.

ATTACHMENT F

• Help create a culture of safety by encouraging your teammates to report any concussion symptoms.

3. Support your injured teammates.

- If one of your teammates has a concussion, let them know you and the team support playing it safe and following medical advice during recovery.
- Being unable to practice or join team activities can be isolating. Make sure your teammates know they're not alone.

No two concussions are the same. Symptoms may appear several hours after the initial impact or even the next day. Symptoms may also evolve over several days. If you are unsure if you have a concussion, talk to your athletic trainer or team physician immediately.



What Happens If I Get a Concussion and Keep Practicing or Competing?

- Due to brain vulnerability after a concussion, an athlete may be more likely to suffer another concussion while symptomatic from the first one.
- In rare cases, repeat head trauma can result in brain swelling, permanent brain damage or even death.
- Continuing to play after a concussion increases the chance of sustaining other injuries too, not just concussion.
- Athletes with concussion have reduced concentration and slowed reaction time. This means that you won't be performing at your best.
- Athletes who delay reporting concussion take longer to recover fully.

What is the Recovery Time for a Concussion?

- Each athlete is different, but emerging information indicates that most athletes fully recover from concussion.
- Some athletes experience persisting post-concussive symptoms, which are managed with exercise and targeted treatment.
- If your symptoms persist, you may also have another treatable condition unrelated to your concussion. If you are experiencing any ongoing symptoms, please seek medical care with the team physician.

What Do I Need to Know About Repeated Head Impacts?

- Research into the new concept of repeated head impacts is evolving rapidly.
- Most head impacts in sport occur at low levels well below the force needed to cause a sports-related concussion.
- The medical and scientific community continues to conduct research to determine if long-term exposure to head impacts may be deleterious to brain health.
- While many questions remain unanswered, the NCAA Concussion Checklist recommends that efforts should be made to reduce head impact exposure in both practice and game settings.

Chronic Traumatic Encephalopathy ("CTE")

- In recent years, there has been ongoing research into CTE, and more research is needed to answer important questions.
- According to the Centers for Disease Control website, researchto-date suggests that CTE is associated with long-term exposure to repeated head impacts at levels that would cause injury to the brain.
- According to the CDC, there is no strong scientific evidence that shows that getting one or more concussions (or other mild traumatic brain injuries) or occasional hits to the head leads to CTE.

More research is needed to better understand:

- The causes of CTE, including the role of repeated head impacts.
- Other potential risk factors for CTE, including the role of a person's sex, genetics, medical history, and environmental and lifestyle factors.
- How the CTE pathology develops, and what symptoms CTE pathology may cause.
- Why some people develop CTE and others do not.

You can find more information on the emerging CTE research at various sources including the CDC, NINDS and the Consensus Statement on Concussion in Sport.

If you are concerned or have questions, please talk to your medical doctor.

Did You Know?

- NCAA rules require that team physicians and athletic trainers manage your concussion and injury recovery independent of coaching staff, or other non-medical, influence.
- We're learning more about concussion every day. To find out more about the largest concussion study ever conducted, which is being led by the NCAA and U.S. Department of Defense, visit ncaa.org/concussion.

CONCUSSION TIMELINE



Baseline Testing

Balance, cognitive and neurological tests that help medical staff manage and diagnose a concussion.



Concussion If you show signs of a concussion, NCAA rules require that you be removed from play and medically evaluated.



Recovery Your school has a concussion management plan, and team physicians and athletic trainers are required to follow that plan during your

recovery.



Returnto-Learn

Return-to-learn should be done in a step-bystep progression in which adjustments are made as needed to manage your symptoms.



Returnto-Sport

Final return-to-sport only happens after you have returned to your pre-concussion baseline and you've gone through a stepby-step progression of increasing activity.



WHAT EDUCATORS NEED TO KNOW

Concussion Safety

What Is a Concussion?

The Consensus Statement on Concussion in Sport, which resulted from the 6th international conference, defines sport-related concussion as follows:

Sport-related concussion is a traumatic brain injury caused by a direct blow to the head, neck or body resulting in an impulsive force being transmitted to the brain that occurs in sports and exercise-related activities. This initiates a neurotransmitter and metabolic cascade, with possible axonal injury, blood flow change and inflammation affecting the brain. Symptoms and signs may present immediately, or evolve over minutes or hours, and commonly resolve within days, but may be prolonged.

No abnormality is seen on standard structural neuroimaging studies (computed tomography or magnetic resonance imaging T1- and T2-weighted images), but in the research setting, abnormalities may be present on functional, blood flow or metabolic imaging studies. Sport-related concussion results in a range of clinical symptoms and signs that may or may not involve loss of consciousness. The clinical symptoms and signs of concussion cannot be explained solely by (but may occur concomitantly with) drug, alcohol, or medication use,



other injuries (such as cervical injuries, peripheral vestibular dysfunction) or other comorbidities (such as psychological factors or coexisting medical conditions).

Additional information on concussion diagnosis, management and prevention in collegiate athletes, including a complete definition of concussion, can be found **here**.

What Is Your Role in Concussion Recovery?

- Each athletics department should have a concussion management plan that outlines the steps to be taken by team physicians and athletic trainers following a sport-related concussion diagnosis and during a student-athlete's recovery.
- The concussion management plan should provide for the identification of an academic point person who will navigate return-to-learn activities with a student-athlete who has been diagnosed with a sport-related concussion.
- The return-to-learn pathway is considered part of the suggested medical management plan and, in more complex cases of return-to-learn, the academic point person will be part of a broader multidisciplinary team.
- Return-to-learn should be done in a step-by-step progression that fits the needs of the individual, with adjustments to be made as needed to manage the student-athlete's unique symptoms and recovery response.
- As an academic point person or other member of academic staff, it is beneficial to understand the science underlying concussion management and the rationale behind related return-to-learn considerations.

Specific Return-to-Learn Considerations

Return-to-learn guidelines assume that both physical and cognitive activities require functional brain activity that may be negatively impacted by concussion. The student-athlete may appear physically normal but may be unable to perform as expected due to concussion symptoms.

The unique nature of concussion symptoms and recovery make it difficult to provide prescriptive recommendations for returnto-learn. Importantly, unrestricted return-to-sport should not occur before unrestricted return-to-learn for injuries occurring while the athlete is enrolled in classes. The broad return-tolearn recommendations outlined on the next page are based on available data and related expert consensus, and portions of the content have been previously published by the NCAA as part of its **Concussion Safety Protocol Checklist** and corresponding **Concussion Safety Protocol Template**.



Return-to-Learn Recommendations

Stepwise Progression

The first step of return-to-learn is relative physical and cognitive rest, although complete rest and isolation should be avoided. Relative cognitive rest involves minimizing potential cognitive stressors, such as reading and schoolwork. The necessary period of time that a concussed student-athlete waits before resuming class or homework should be individualized with a return to classroom/studying as tolerated. However, some student-athletes may not require a formal plan or accommodations. Return-tolearn should be gradual with specific attention to any significant worsening of concussion symptoms following cognitive exposure or symptoms lasting longer than two weeks. According to currently available expert consensus:

- If the student-athlete cannot tolerate light cognitive activity, they should remain at home or in the residence hall.
- Once the student-athlete can tolerate light cognitive activity, they should return to the classroom as tolerated, often in graduated increments.
- If the student-athlete experiences prolonged worsening of symptoms with academic challenge (i.e., more symptomatic than baseline), or scores on clinical/cognitive measures decline, the team physician or return-to-learn 'point person' should be notified, and the student-athlete's return-to-learn activity reassessed.

Common Academic Adjustments

For the student-athlete whose academic schedule requires a minor modification in the first one to two weeks following a sport-related concussion, adjustments can often be accomplished through consultation between the student-athlete and the academic point person without material changes to schedules, curriculum or testing environments. Recovery and return-to-learn schedules will vary on a case-by-case basis but the vast majority of young adults have a full return-to-learn with no additional academic support by 10 days post-injury.

Persisting Symptoms

- In the case of persisting symptoms, the extent of necessary academic adjustments/accommodations should be decided in consultation with a broader multi-disciplinary team that may include, among others, the team physician, athletic trainer, faculty athletics representative, coach, teachers, office of disability representatives, neuropsychologist or psychologist/counselor.
- Cases that cannot be managed through schedule or academic accommodations may require the engagement of other campus resources. These resources should be engaged in a manner consistent with the Americans with Disabilities Act Amendments Act and should include learning specialists and/or representatives from the campus office of disability services or ADAAA.

Implementation of Return-to-Learn

The successful implementation of return-to-learn depends on several variables, including the following:

- Recognition that concussion symptoms vary widely among student-athletes, and even within the same individual who may be suffering a repeat concussion.
- Identification of an academic point person who can work with the recovering student-athlete to navigate the challenges that may occur in the academic space.
- Identification of symptoms that may warrant additional medical attention or impair cognitive recovery, such as fatigue, headache, mental health symptoms and disorders, ocular dysfunction, cervical and vestibular dysfunction, cognitive impairment, autonomic dysfunction and pain.
- Identification of additional campus resources that can help assure that the rights of the recovering student-athlete are adequately considered during this transition period.

Available Campus Resources

Campus resources vary, and may include the following:

- Learning specialists. Many college campuses have certified learning specialists who have specialized knowledge of medical conditions such as concussion and post-concussion syndrome.
- Office of disability services. Most campuses have a disability office that is responsible for verifying each student's impairment under the Americans with Disabilities Act Amendments Act and some institutions also offer a separate ADAAA office.



WHAT COACHES NEED TO KNOW

Concussion Safety

What Is a Concussion?

Concussion is a mild traumatic brain injury that results from either a direct blow to the head or an impulsive force to the body that causes significant head motion. Concussion symptoms can result immediately or develop over many hours.

How Can I Tell If an Athlete Has a Concussion?

You may notice the athlete has a change in behavior or balance following a hit or impact, or other manifestations such as:

- Appears dazed or stunned.
- Forgets an instruction.
- Is confused about an assignment or position.
- Is unsure of the game, score or opponent.
- Appears less coordinated, unsteady on feet or wobbly.
- Answers questions slowly.
- Loses consciousness.

The athlete may tell you he or she is experiencing ...

- A headache, head pressure or that he or she doesn't feel right following a blow to the head.
- Nausea.
- Balance problems or dizziness.
- Double or blurry vision.
- Sensitivity to light or noise.
- Feeling sluggish, hazy or foggy.
- Confusion, concentration or memory problems.

What Happens If an Athlete Gets a Concussion and Keeps Practicing or Competing?

- Due to brain vulnerability after a concussion, an athlete may be more likely to suffer another concussion while symptomatic from the first one.
- In rare cases, repeat head trauma can result in brain swelling, permanent brain damage or even death.
- Continuing to play after a concussion increases the chance of sustaining other injuries too, not just concussion.
- Athletes with a concussion have reduced concentration and slowed reaction time. This means they won't be performing at their best.
- Athletes who delay reporting concussion may take longer to recover fully.



What Is the Recovery Time for a Concussion?

- Each athlete is different, but emerging information indicates that most athletes fully recover from concussion.
- Some athletes experience persisting post-concussive symptoms, which are managed with exercise and targeted treatment.
- If an athlete's symptoms persist, they may also have another treatable condition unrelated to their concussion. If the athlete is experiencing any ongoing symptoms, they should seek medical care with the team physician.

What Do I Need to Know About Repeated Head Impacts?

- Research into the new concept of repeated head impacts is evolving rapidly.
- Most head impacts in sport occur at low levels well below the force needed to cause a sports-related concussion.
- The medical and scientific community continues to conduct research to determine if long-term exposure to head impacts may be deleterious to brain health.
- While many questions remain unanswered, the NCAA Concussion Checklist recommends that efforts should be made to reduce head impact exposure in both practice and game settings.

No two concussions are the same. Symptoms may appear several hours after the initial impact or even the next day. Symptoms may also evolve over several days. All possible concussions must be evaluated by an athletic trainer or team physician (or physician designee) with concussion experience.

Chronic Traumatic Encephalopathy ("CTE")

- In recent years, there has been ongoing research into CTE, and more research is needed to answer important questions.
- According to the Centers for Disease Control website, research-to-date suggests that CTE is associated with longterm exposure to repeated head impacts at levels that would cause brain injury.
- According to the CDC, there is no strong scientific evidence that shows that getting one or more concussions (or other mild traumatic brain injuries) or occasional hits to the head leads to CTE.

More research is needed to better understand:

- The causes of CTE, including the role of repeated head impacts.
- Other potential risk factors for CTE, including the role of a person's sex, genetics, medical history, and environmental and lifestyle factors.
- How the CTE pathology develops, and what symptoms CTE pathology may cause.
- Why some people develop CTE and others do not.

You can find more information on the emerging CTE research at various sources including the CDC, NINDS and the Consensus Statement on Concussion in Sport.

Did You Know?

- Most contact or collision teams have at least one student-athlete diagnosed with a concussion every season.
- Your school has a concussion management plan, and team physicians and athletic trainers are expected to follow that plan during a student-athlete's recovery.
- NCAA rules require that team physicians and athletic trainers have the unchallengeable authority to make all medical management and return-to-sport decisions for student-athletes.
- We're learning more about concussion every day. To find out more about the largest concussion study ever conducted, which is being led by the NCAA and U.S. Department of Defense, visit ncaa.org/concussion.

	Preseason	In-Season	Time of Injury	Recovery
What can I do?	Create a culture in which concussion reporting is encouraged and promoted.	Know the signs and symptoms of concussions.	Remove athletes from play immediately if you think they have a concussion and refer them to the team physician or athletic trainer.	Follow the recovery and return-to-sport protocol established by team physicians and athletic trainers.
Why does it matter?	Athletes who don't immediately seek care for a suspected concussion take longer to recover.	The more people who know what to look for in a concussed athlete, the more likely a concussion will be identified.	Early removal from play can mean a quicker recovery and help avoid further, potentially serious injury.	Team physicians and athletic trainers have the training to follow best practices related to the concussion recovery process.
Tips and strategies	Be present when your team physician or athletic trainer provides concussion education material to your team. Tell your team that this matters to you.	Check in with your team physician or athletic trainer if you want to learn more about concussion safety.	Provide positive reinforcement when an athlete reports a suspected concussion.	Tell athletes that health decisions, including clearance for unrestricted return to sport are determined by the team physician and athletic trainer.

You play a powerful role in setting the tone for concussion safety on your team. Let your team know that you take concussion seriously and reporting the symptoms of a suspected concussion is an important part of your team's values.



NCAA is a trademark of the National Collegiate Athletic Association. Fall 2023.

2

2

What Can I Do to Keep Athletes Safe?