

2021-22 SPORTS MEDICINE ADVISORY COMMITTEE MEETING
Video (Zoom) Conferencing
Thursday, October 21, 2021
9:30 a.m.

Members Present:

Nicole Carter, Novi
Dr. John Evans, Ann Arbor
Dr. Monica Goble, East Lansing
Dr. Edwin Kornoelje, Grand Rapids
Dr. Dallas Lintner, Owosso
Sandra Noto, Wyoming
Kristi Nowka, East Jordan
Meaghan Rourke, Allen Park
Meg Seng, Ann Arbor

Mitch Smelis, Fenton
Pat Watson, Bloomfield Hills
J.D. Wheeler, Hartland

Members Absent:

Candy Cox
Dr. Michael Shingles
Dr. Neal Weinberg

MHSAA Staff:

Tony Bihn
Cole Malatinsky
Kathy Vrugink Westdorp (Recorder)

GENERAL REVIEW AND PURPOSE OF THE COMMITTEE

The MHSAA Sports Medicine Advisory Committee (SMAC) exists to serve the MHSAA membership while emphasizing the health and safety of students in interscholastic sports. The goals of this committee include:

1. To advise and work cooperatively with the Representative Council, Executive Committee, staff and sport committees on medical and safety issues as they relate to interscholastic sport's rules writing, regulations and guidelines.
2. Monitor, evaluate and disseminate current sports medicine information to the MHSAA and its member schools.
3. Evaluate existing resources while developing new educational measures provided through the MHSAA for member schools.
4. Work cooperatively with MHSAA sport committees to address sports medicine issues and the impact on the health and risk management of its participating students.
5. Assist the MHSAA in identifying, prioritizing and researching sport medicine issues.

The Sports Medicine Advisory Committee continues to be cognizant and reviews the full picture of what the MHSAA does, and is aware of the culture of what the MHSAA does in connection to schools and students in grades 6 – 12. The process in which the Representative Council considers proposals and how the proposals relate to the educational mission of member schools was explained and continues to be a priority.

COVID-19 UPDATES – REPORTS FROM SCHOOLS AND ORGANIZATIONAL ENTITIES

Committee members were asked to report on the latest information on COVID-19 from their respective areas of expertise. Dr. Monica Goble reported that although there were concerns about myocarditis following COVID and vaccination, they were not seeing cardiac arrest/cardiac deaths associated with COVID in children and young adults. There are also numerous studies that are ongoing reviewing COVID and vaccinations as it relates to pediatric heart health. Dr. Goble indicated that there may be some association of vaccine and myocarditis, particularly amongst males, but heart-related issues and risk from COVID-19 far outweigh the risk of vaccination.

Dr. Edwin Kornoelje indicated that summer and fall have been more typical in terms of injuries by athletes seen at his clinic. Data indicates that not all young athletes diagnosed with COVID need comprehensive cardiovascular testing following diagnosis. Current guidelines provided by various medical associations (pediatrics and sports medicine) suggest that only those who have moderate to severe COVID cases need referral to a specialist and additional testing following a COVID diagnosis. He reiterated that for all age groups, young people in particular, it is important to get back to normal as much as possible.

Dr. John Evans provided information that mental health concerns are still on the rise with athletes. Highly publicized situations with Simone Biles and Naomi Osaka brought mental health in sports to the forefront and he is seeing more issues with injury and associated mental health concerns. According to research, female

athletes were more likely to seek out mental health resources than males; college athletes more likely to seek help than high school athletes; and athletes in non-contact sports were more likely to seek out mental health resources. This suggests that young male athletes in contact sports (football, ice hockey, lacrosse, etc.) may need additional attention and prodding to address some of the stigma surrounding mental health as well as additional encouragement to get them to take advantage of the resources available.

Representatives from MATS (Michigan Athletic Trainers) indicated that there is some chaos this school year as some of the counties have mask mandates and some do not. However, this year there are clear standards in place with close contacts as the health departments are allowing for a testing option vs. the straight quarantines that were instituted last year. There were also some significant orthopedic issues/injuries which may be associated with the extended layoff caused by the stay-at-home orders, which could be some of the reason for the lack of early conditioning. One of the other athletic trainers indicated that they had seen many more overuse injuries among athletes and spoke to the continued challenges with quarantine and inconsistencies, both between local health department orders and within the orders. Another athletic trainer also indicated inconsistency between health departments as well as mandates vs. school recommendations. In one area, there was an increase in strep throat and there were very few COVID cases were being seen. However, the concern was that students may simply not be getting tested for fear of causing a team-wide quarantine. Dr. Kornoelje theorized that interruption in normal training is contributing to the type and number of injuries that are now being seen, however there will be more known in 2-3 years.

Within the schools report, Pat Watson indicated that Oakland County had student mask mandates but felt it was much easier to regulate this year due to specific quarantine requirements following positive tests. Mr. Watson indicated that COVID cases appear to be much higher in non-athletes as compared to athletes among the high school student population. He also indicated that there was an increase in sports participation this year. Nicole Carter reported that the COVID numbers among students were down this year but that she is seeing cases among the teaching staff. At her school, there has been a great emphasis placed on addressing mental health concerns and she indicated that there is a later start time this year which has decreased stress amongst students, teachers, and parents. Additionally, two days a week, students and teachers participate in mental, psychological, and social training exercises (mindfulness) as part of the continued efforts of ensuring students and teachers are making meaningful connections. Dallas Lintner also indicated that the number of students in quarantine has become much more manageable. Shiawasee County has a "test to stay program" which means as long as the student stays negative, they can participate in academic and athletic activities which results in more students remaining in the building throughout the day. Dr. Lintner indicated that there were some students who struggled to stay constantly engaged throughout an entire school day after the online schedule last year. He also had concerns that students may be suffering from learning loss and have not developed the prerequisite skills to continue in more advanced coursework. J.D. Wheeler (Livingston County) indicated that there was no mask mandate at this time, a low vaccination rate and currently a fairly high positive rate which was quarantining students and that he is producing 3-4 quarantines/close contact lists each day. The mental health and stress of testing positive has weighed heavily with all students.

Committee members were thanked for their powerful and thorough COVID-19 reports which were appreciated by all.

MHSAA EPIDEMIC EMERGENCY PLAN/MEDICAL TIME OUT HEAT ACCLIMATIZATION/SPORTS-RELATED INJURY SURVEILLANCE STUDY

The *MHSAA Epidemic Emergency Plan*, *MI Safer Schools Guidance for Managing Students Exposed to COVID19*, and *Resocialization of Collegiate Sport* were all documents that were provided for the committee, and it was explained how each were currently being utilized. In addition, the Medical Time Out Procedure List was described and promoted at all the MHSAA Update Meetings this year. This includes the procedures for the home team sports medical staff, as well as emergency hand signals and responsibilities for athletic trainers, medical staff, EMS Providers, and school officials.

The "Model Policy for Managing Heat and Humidity" was reviewed and the possibility of creating a Wind Chill/Cold Weather Policy per request from the Ski Committee was discussed. Also reviewed was the NFHS Sports-Related Injury Surveillance Study which included patterns of injury by sport and that the head/face was the most commonly injured body site in five sports and the ankle in five sports. Consistent with prior years, strains/sprains were the most common injury diagnosis in all sports except boys' ice hockey and cheerleading in which concussions were the most common injury diagnosis. The trends over time revealed that participation in high school sports varied across the country during the 2020-21 academic year due to COVID-19. Despite the

pandemic, in general, overall competition and practice injury rates remained relatively stable in 2020-21 compared to previous years. Concussion injury rates were lower than in previous year and multiple factors may have affected concussion rates including characteristics of schools playing sports, athletes who were able to choose to compete during the pandemic, other injuries sustained during the sport season, athletic trainers ability to participate in the HS RIO, changes in practice-related activities, and the national sample in terms of sport cancellation/modified seasons.

2020-21 MHSAA HEAD INJURY REPORTING

When SMAC met in May of 2021, there was preliminary data indicating that head injury reports would be down. This was verified in the final numbers that were provided. A total of 1709 head injury reports were included in the 2020-21 summary, down 42% from 2951 reported in 2019-20 and down 54% from the 3686 reports in 2018-19, the last school year which was not impacted by COVID. Head injury reports per 1000 participants in all contact sport fell anywhere from 27% to 73% in 2020-21 compared to 2018-19. Several factors related to the COVID pandemic contributed to the decrease. This included epidemic orders from the Governor and the MDHHS which delayed the start of normal activity in both the fall and winter sports and altering schedules, resulting in significantly fewer practices and games. In addition, participation was down 16% from 2018-19 and in 2020-21, likely from students choosing not to participate and team/schools opting out of seasons because of local school policies or not having enough students to field a team. There were fewer participants, fewer practices, fewer games; therefore, fewer exposures to potential head injury events due to COVID-19.

Also provided to the committee was a paper published with the Journal of the American Medical Association which was entitled *Association of Sex with Adolescent Soccer Concussion Incidence and Characteristics*. This paper was produced by researchers at Michigan State University utilizing concussion data from the MHSAA head injury reporting system. Based on boys and girls soccer concussions from 2016-17 to 2018-19, the data indicates that the risk of sport related concussion in female soccer players was greater than in male soccer players. It also indicates that male soccer players most often sustained sport related concussion from contact with another player while female soccer player's sports related concussions were most often from non-player contact events. Male soccer players were more likely to be removed from play on the day of injury and the overall median time to return to play was 11 days which was typically 2 days earlier than female athletes. The conclusion reveals that because of these sex-associated differences, the mechanism of injury, immediate management and outcomes, consideration might be given to sex-specific approaches to participation and concussion management in sport.

MENTAL HEALTH TRAINING/FREE ONLINE NFHS COURSES

Committee members were provided with information and a link from NBC News regarding the "BeNice" program (Notice, Invite, Challenge and Empower), regarding Michigan high school coaches getting mental health training which has been a game changer for students. All coaches (varsity and sub-varsity) received this mental health training in the health and safety portion of their mandatory rules meetings.

Several options for free online courses for coaches, school personnel, parents and students were also introduced. These are found at [nfhslearn.com](https://www.nfhslearn.com).

- Bully, Hazing and Inappropriate Behaviors
- Bullying, Hazing and Inappropriate Behaviors
- The Collapsed Athlete
- Concussion for Students
- Concussion in Sports
- Covid-19 for Coaches and Administrators
- Hazing Prevention for Students
- Heat Acclimatization and Heat Illness Prevention
- A Guide to Sports Nutrition
- Implicit Bias
- Protecting Students from Abuse
- Student Mental Health and Suicide Prevention
- Sudden Cardiac Arrest

PRIOR BUSINESS: PRE-PARTICIPATION PHYSICAL

In a prior meeting, the “Physical sub-committee” provided a report in which they explored alternative options to the MHSAA annual physical requirement, specifically regarding the firm April 15th date (i.e., a pre-participation physical is only current and valid if it is performed on or after April 15th of the previous school year). This sub-committee provided the communications that they had with other state’s athletic association administrators who had various timetables for when physicals are required. This sub-committee’s initial recommendation was to move to a model that requires a pre-participation physical exam to be completed once every 24 months, and in alternating years, students submit an annual questionnaire (developed by the MHSAA), signed by the student and parent/guardian, and submitted to the school administration. If the student answers “yes” to any questions, a new physical or physician’s clearance will be required prior to participation.

A statement of rationale to go to a two-year model was provided for school personnel. In this statement, it was indicated that the MHSAA SMAC recommended that both a history and a physical exam be performed before participation in organized middle school and high school sports and that screening should then be repeated every two years with an interim history (health questionnaire) taken in the intervening year. This policy was in place due to COVID conditions in 2020-21 and athletic departments have access to various scheduling, management and compliance software that can be customized to set flags or notifications for expiration dates. It was also indicated that the American Academy of Pediatrics and the American Heart Association recommends that a history and physical exam be performed every two years during sport participation with an interim history taken in the intervening years. It was further repeated that exams in the office setting by the athlete’s primary care provider have the advantages of privacy, continuity of care, and the provider’s knowledge of the medical and family history.

In addition, a survey to provided to all schools included the following question: *In an effort to reduce the logistical concerns, such as insurance coverage limits and associated costs of a separate sports physical – especially if tied to a specific date – the MHSAA Sports Medicine Advisory Committee (SMAC) recommends that both a history and a physical examination be provided before participation in organized middle school and high school sports and that a physical exam would be valid for two school years with an interim history (health questionnaire) taken in the intervening year. Does your school support this recommendation?* **622 Responses: 62.4% Yes, 37.6% No**

The committee further discussed the recommendation, and the medical perspective is that it is not necessary to have a sports physical every year. There were still some concerns that a two-year physical model doesn’t solve the issue as students/parents will always do the minimum. The continued messaging is that there is a difference between the pre-participation sports exam and an annual physical exam performed by a pediatrician/primary care physician. The necessary need in sports is to have an accurate medical history and a quality physical exam.

NEXT SPORTS MEDICINE ADVISORY COMMITTEE MEETING DATE

The committee determined that additional discussion would need to occur on several of the noted issues. The meeting adjourned at 11:45 a.m. and the next meeting is scheduled for Thursday, April 21, 2022.