

SUMMARY REPORT

MICHIGAN HIGH SCHOOL ATHLETIC ASSOCIATION HEAD INJURY REPORTING SYSTEM

2024-2025 School Year

I. Introduction & Methodology

1.1 Overview

Promotion of student-athlete health and safety is a core value of interscholastic athletics and one of the guiding principles of the Michigan High School Athletic Association in its mission to increase participation and raise the quality of the experience for all involved in school sports in the state of Michigan. Few issues regarding the health of young student-athletes and the safety of school sports have generated as much concern as head trauma and concussions. Although equipment advancements, increases in coaches' education, and safety-oriented changes to practice policies and game rules have made school sports safer than they have ever been, precise data on the frequency and severity of head injuries incurred during interscholastic athletic events is limited. Beginning in the 2015-16 school year, the MHSAA required that all head injuries sustained during MHSAA-sponsored activities be reported to the MHSAA through an online reporting system. The data generated from the MHSAA Head Injury Reporting System will establish a baseline, eventually allowing the MHSAA to determine progress year-to-year in Michigan school sports in this critical area of health and safety.

1.2 Aims

The specific objectives of the MHSAA Head Injury Reporting System are:

- A. Determine the incidence (total number) of head injuries sustained by athletes participating in MHSAA-sponsored activities.
- B. Calculate and compare head injury prevalence rates using head injury report counts and participation data for MHSAA-sponsored activities.
- C. Provide detailed information regarding head injuries sustained during MHSAA-sponsored activities, including athlete demographics, the circumstances of the injury event (date, practice or game, time during practice or game of injury, protective equipment worn, cause of injury event, initial examiner, etc.) as well as subsequent clearance/return to activity after the injury.
- D. Use the collected data to identify any patterns across variables.

1.3 Design

Beginning with the 2015-16 school year, head injury reporting became mandatory for MHSAA member schools. Under the MHSAA Concussion Protocol, **member schools must complete and submit an online report designated by the MHSAA to record and track head injury events when they occur in all levels of all sports during the season in practices and competitions.** The reporting mechanism developed by the MHSAA is identified in this report as the MHSAA Head Injury Reporting System.

Reporting by member schools requires completing two basic online report forms; the first report is completed after the initial head injury event, and the second is completed after the student has received clearance to return to activity after the head injury or the season in which the injury occurred has ended.

Definitions

The MHSAA Concussion Protocol and Head Injury Reporting System defined a head injury as:

An injury that occurred as a result of participation during an in-season practice, scrimmage, or game in one of the 29 sports for which the MHSAA provides a post-season tournament – namely baseball, boys and girls basketball, boys and girls bowling, girls competitive cheer, boys and girls cross country, football (11-player and 8-player), boys and girls golf, girls gymnastics, ice hockey, boys and girls alpine skiing, boys and girls lacrosse, boys and girls soccer, softball, boys and girls swimming & diving, boys and girls tennis, boys and girls track & field, volleyball, and boys and girls wrestling – **and** – required the athlete be withheld from activity after exhibiting signs, symptoms, or behaviors consistent with a concussion (such as loss of consciousness, headache, dizziness, confusion or balance problems).

The MHSAA Concussion Protocol and Head Injury Reporting System defined clearance as:

Written authorization from an M.D., D.O., Nurse Practitioner, or Physician's Assistant to return to unrestricted activity.

Population

All male and female students in grades 9-12 of MHSAA member schools participating in MHSAA-sponsored activities during the 2024-25 school year.

The MHSAA is an association of approximately 1500 individual public, private and parochial high schools and junior high/middle schools. At the start of the 2024-25 school year, member schools include 754 high schools of various enrollments and resources (188 schools with enrollment of 793 students or above, 188 schools with enrollment between 792-378 students, 189 schools with enrollment between 377-169 students, and 191 schools with enrollment of 168 students or below) and 800+ member junior/middle schools*.

*Junior high/middle school head injury data is not included in this report. Injuries to 6th, 7th, and 8th graders participating on high school teams (allowable under specific circumstances for schools and cooperative programs with fewer than 100 students) were included.

1.4 Data Collection

As MHSAA member schools vary widely with respect to school personnel and resources (not all schools employ an athletic trainer or even a full-time athletic administrator), the MHSAA Head Injury Reporting System was designed for use by athletic trainers, school administrators, and coaches. The system was accessed through login to MHSAA.com. Only users identified within the system as an athletic trainer, school administrator (i.e., athletic director, athletic department secretary, principal, or superintendent), or coach had the ability to access the online system and submit and review reports for the school(s) with which they are associated. The MHSAA Concussion Protocol does not specifically define who at the school must complete and submit the report, nor does it specify a time frame to submit the report after a head injury event – local schools were left to make those decisions and create their own reporting protocol based on their personnel and resources. However, reports were procured by the end of each season.

The MHSAA Head Injury Reporting System process consisted of two parts: 1) an initial head injury report and 2) a subsequent follow-up report. After a head injury event, the school was required to complete and submit an initial head injury report. This initial report was an online form designed to collect general information about the student (i.e., grade, gender, level, sport) and the injury event, including event date, whether the injury

event occurred in practice or game, time of injury event during practice or game, protective equipment worn on the head at the time of the event, cause of the event (i.e., person to person contact, person to object contact, person to ground contact, or unknown), surface type, initial examiner, and removal from play decision.)

After the initial head injury report was submitted, the report was assigned a unique seven-digit ID code and was saved in a report listing. This served as an electronic record of the head injury reports submitted by the school into the system and where the school accessed and completed a follow-up report (details forthcoming). In addition to being saved in the report list, a PDF file of the report containing the ID code was generated and sent via email to the school. No personally identifiable information was included in the report in order to protect student privacy. Schools were instructed to print the PDF copy and record the injured student's name or student ID number to link the report with the specific student so that report could be referenced for completion of the second part of the reporting process: the follow-up report.

The final part of the reporting process required the completion of a follow-up report. The follow-up is a second online report form linked to the initial head injury report designed to collect general information regarding the student's return to activity after the head injury, including the official diagnosis of the head injury event, the date the student was authorized to return to activity, medical examiner authorizing a return to activity, facility in which the student was seen by the authorizing medical examiner, conditions to return, and missed school as a result of the injury event. The follow-up report was to be completed once the student received authorization to return to activity or the season ended.

1.5 Data Management

Initial head injury reports were reviewed by members of the MHSAA staff daily. The school was contacted if a clear reporting error or anomaly was identified during review. As schools were not allowed to edit reports once submitted, all changes or removal of reports were handled by the MHSAA staff.

Follow-up reports were also reviewed on a weekly basis. Schools were contacted approximately three weeks after the reported injury date and then each week in the two to three weeks prior to the end of the season. If the head injury report remained unresolved, reminders were sent to complete the follow-up report once the student received appropriate clearance or the season in which the injury occurred ended.

Head injury reports not diagnosed as concussions, and confirmed as no concussion in the follow-up report were marked and excluded from this report. Head injury reports with no follow-up report completed were included, however.

Schools with no head injury reports for a season (Fall, Winter, and Spring) were required to report this at the conclusion of each season by attesting to this information in the Head Injury Reporting System. Follow-up continued each season with all schools who had not reported concussion or zero concussion until data was received by no less than 99% of MHSAA member high schools.

1.6 Data Analysis

The data contained in this report is largely a summary of the data gather by the MHSAA Head Injury Reporting System by sport.

Head injury prevalence rates were calculated by dividing head injury reports count by participation. For instance:

$$\text{Girls Soccer Head Injury Prevalence Rate} = \frac{\text{\# girls soccer head injury reports}}{\text{girls soccer participation \#}}$$

In order to more easily compare head injury prevalence rates between sports, the head injury prevalence rate was also expressed per 1,000 participants. Head injury prevalence rate per 1,000 participants was found by placing the head injury prevalence ratio (injury reports/participation) on one side of an equation and placing the ratio (X / 1,000 participants) on the other side of the equation and solving algebraically for X. Essentially, the head injury prevalence rate per 1,000 participants for each sport was found by multiplying the head injury prevalence rates by 1,000 and then rounding to the nearest whole number.

II. Overall Head Injury Reports

Table 2.1 Reported Head Injuries by Sport, MHSAA Head Injury Reporting System, 2024-25 School Year

Baseball	Varsity	29	Boys Golf	Varsity	0	Softball	Varsity	46	
	Junior Varsity	10		Junior Varsity	0		Junior Varsity	34	
	Freshman	2		Freshman	0		Freshman	0	
	TOTAL	41		TOTAL	0		TOTAL	80	
Boys Basketball	Varsity	54	Girls Golf	Varsity	0	Boys Swimming & Diving	Varsity	9	
	Junior Varsity	48		Junior Varsity	0		Junior Varsity	0	
	Freshman	31		Freshman	0		Freshman	0	
	TOTAL	133		TOTAL	0		TOTAL	9	
Girls Basketball	Varsity	122	Girls Gymnastics	Varsity	4	Girls Swimming & Diving	Varsity	19	
	Junior Varsity	104		Junior Varsity	0		Junior Varsity	0	
	Freshman	13		Freshman	0		Freshman	0	
	TOTAL	239		TOTAL	4		TOTAL	19	
Boys Bowling	Varsity	0	Ice Hockey	Varsity	57	Boys Tennis	Varsity	1	
	Junior Varsity	0		Junior Varsity	5		Junior Varsity	1	
	Freshman	0		Freshman	0		Freshman	0	
	TOTAL	0		TOTAL	62		TOTAL	2	
Girls Bowling	Varsity	1	Boys Lacrosse	Varsity	70	Girls Tennis	Varsity	3	
	Junior Varsity	0		Junior Varsity	21		Junior Varsity	3	
	Freshman	0		Freshman	0		Freshman	0	
	TOTAL	1		TOTAL	91		TOTAL	6	
Girls Competitive Cheer	Varsity	59	Girls Lacrosse	Varsity	33		Varsity	4	
	Junior Varsity	9		Junior Varsity	14		Junior Varsity	1	
	Freshman	0		Freshman	0		Freshman	0	
	TOTAL	68		TOTAL	47		TOTAL	5	
Boys Cross Country	Varsity	0	Boys Skiing	Varsity	4	Girls Track & Field	Varsity	11	
	Junior Varsity	0		Junior Varsity	0		Junior Varsity	0	
	Freshman	0		Freshman	0		Freshman	0	
	TOTAL	0		TOTAL	4		TOTAL	11	
Girls Cross Country	Varsity	4	Girls Skiing	Varsity	4	Volleyball	Varsity	92	
	Junior Varsity	0		Junior Varsity	0		Junior Varsity	57	
	Freshman	0		Freshman	0		Freshman	28	
	TOTAL	4		TOTAL	4		TOTAL	177	
11-Player Football	Varsity	569	Boys Soccer	Varsity	119	Boys Wrestling	Varsity	192	
	Junior Varsity	561		Junior Varsity	41		Junior Varsity	51	
	Freshman	179		Freshman	0		Freshman	0	
	TOTAL	1309		TOTAL	160		TOTAL	243	
8-Player Football	Varsity	61	Girls Soccer	Varsity	179	Girls Wrestling	Varsity	30	
	Junior Varsity	15		Junior Varsity	60		Junior Varsity	1	
	Freshman	0		Freshman	3		Freshman	0	
	TOTAL	76		TOTAL	242		TOTAL	31	
								TOTAL REPORTS	3068

Table 2.2 Head Injury Prevalence Rates by Sport, MHSAA Head Injury Reporting System, 2024-25 School Year

SPORT	Boys*				Girls			
	PARTICIPANTS	HEAD INJURY REPORTS	HEAD INJURY REPORT PREVALENCE RATE	HEAD INJURY REPORTS PER THOUSAND PARTICIPANTS	PARTICIPANTS	HEAD INJURY REPORTS	HEAD INJURY REPORT PREVALENCE RATE	HEAD INJURY REPORTS PER THOUSAND PARTICIPANTS
Baseball	16,057	41	0.26%	3	-	-	-	-
Basketball	20,541	133	0.65%	6	13,063	239	1.83%	18
Bowling	4,333	0	0.00%	0	2,689	1	0.04%	0
Competitive Cheer	-	-	-	-	6,319	68	1.08%	11
Cross Country	8,209	0	0.00%	0	6,826	4	0.06%	1
Football - 11-player	33,506	1,309	3.91%	39	-	-	-	-
8-player	2,704	76	2.81%	28	-	-	-	-
Golf	7,416	0	0.00%	0	3,970	0	0.00%	0
Gymnastics	-	-	-	-	497	4	0.80%	8
Ice Hockey	3,107	62	2.00%	20	-	-	-	-
Lacrosse	5,038	91	1.81%	18	3,194	47	1.47%	15
Skiing	762	4	0.52%	5	727	4	0.55%	6
Soccer	14,112	160	1.13%	11	11,909	242	2.03%	20
Softball	-	-	-	-	11,368	80	0.70%	7
Swimming & Diving	4,073	9	0.22%	2	4,648	19	0.41%	4
Tennis	6,163	2	0.03%	0	9,485	6	0.06%	1
Track & Field	24,759	5	0.02%	0	18,108	11	0.06%	1
Volleyball	-	-	-	-	19,679	177	0.90%	9
Wrestling	10,917	243	2.23%	22	1,505	31	2.06%	21

*Boys participation and head injury data includes both males AND females playing on primarily male teams.

Table 2.3 Head Injuries by Grade - All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
7th	0	0.0%	0	0.0%	0	0.0%
8th	0	0.0%	1	0.1%	1	0.0%
9th	622	29.2%	287	30.6%	909	29.6%
10th	623	29.2%	263	28.1%	886	28.9%
11th	484	22.7%	216	23.1%	700	22.8%
12th	402	18.9%	170	18.1%	572	18.6%
TOTAL	2131	100.0%	937	100.0%	3068	100.0%

Table 2.4 Head Injuries by Level of Competition - All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
Freshman	212	9.9%	44	4.7%	256	8.3%
Junior Varsity	753	35.3%	283	30.2%	1036	33.8%
Varsity	1166	54.7%	610	65.1%	1776	57.9%
TOTAL	2131	100.0%	937	100.0%	3068	100.0%

Table 2.5 Head Injuries by Type of Exposure - All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
Practice	662	31.1%	291	31.1%	953	31.1%
Competition	1469	68.9%	646	68.9%	2115	68.9%
TOTAL	2131	100.0%	937	100.0%	3068	100.0%

Table 2.6 Head Injuries by Time during Practice or Competition of Injury Event - All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
Start of practice	55	8.3%	37	12.7%	92	9.7%
Middle of practice	378	57.1%	150	51.5%	528	55.4%
End of practice	229	34.6%	104	35.7%	333	34.9%
PRACTICE TOTAL	662	100.0%	291	100.0%	953	100.0%
Start of competition	155	10.6%	80	12.4%	235	11.1%
Middle of competition	745	50.7%	344	53.3%	1089	51.5%
End of competition	569	38.7%	222	34.4%	791	37.4%
COMPETITION TOTAL	1469	100.0%	646	100.0%	2115	100.0%

Table 2.7 Activity Type for All Head Injury Events during Practice – All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
During a drill	471	71.1%	214	73.5%	685	71.9%
During simulated competition-scrimmage	168	25.4%	66	22.7%	234	24.6%
Not specified	23	3.5%	11	3.8%	34	3.6%
TOTAL	662	100.0%	291	100.0%	953	100.0%

Table 2.8 Injury Occurred While Playing on Offense, Defense or Special Teams for All Head Injury Events during Practice – All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
Offense	423	19.8%	70	7.5%	493	16.1%
Defense	458	21.5%	200	21.3%	658	21.4%
Special Teams	82	3.8%	1	0.1%	83	2.7%
Unknown	756	35.5%	243	25.9%	999	32.6%
Not Applicable	412	19.3%	423	45.1%	835	27.2%
TOTAL	2131	100.0%	937	100.0%	3068	100.0%

Table 2.9 Head Injuries by Cause of Injury Event - All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
Person to person contact	1324	62.1%	294	31.4%	1618	52.7%
Person to object contact (e.g. wall, equipment)	150	7.0%	356	38.0%	506	16.5%
Person to playing surface contact	419	19.7%	238	25.4%	657	21.4%
Uncertain as to the cause of the event	238	11.2%	49	5.2%	287	9.4%
TOTAL	2131	100.0%	937	100.0%	3068	100.0%

Table 2.10 Head Injuries by Initial Examiner - All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
Athletic trainer	1095	51.4%	432	46.1%	1527	49.8%
Coach	207	9.7%	155	16.5%	362	11.8%
Sideline emergency personnel	11	0.5%	1	0.1%	12	0.4%
Other appropriate health care professional	10	0.5%	6	0.6%	16	0.5%
DO	1	0.0%	1	0.1%	2	0.1%
MD	13	0.6%	8	0.9%	21	0.7%
PA	0	0.0%	0	0.0%	0	0.0%
NP	4	0.2%	1	0.1%	5	0.2%
Athletic director	11	0.5%	6	0.6%	17	0.6%
Not examined at time of suspected head injury	424	19.9%	204	21.8%	628	20.5%
Multiple examiners	355	16.7%	123	13.1%	478	15.6%
TOTAL	2131	100.0%	937	100.0%	3068	100.0%

Table 2.11 Athlete Removal from Activity at the Time of Injury Event – All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	1607	75.4%	681	72.7%	2288	74.6%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	29	1.4%	11	1.2%	40	1.3%
NOT removed from activity at the time of the injury event*	495	23.2%	245	26.1%	740	24.1%
TOTAL	2131	100.0%	937	100.0%	3068	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 2.12 Athletes Reporting Previous Concussion after Head Injury Event – All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
Reported at least one previous concussion	388	18.2%	148	15.8%	536	17.5%
No reported previous concussions	1743	81.8%	789	84.2%	2532	82.5%
TOTAL	2131	100.0%	937	100.0%	3068	100.0%

Table 2.13 Most Recent Concussion for Athletes Reporting Previous Concussion after Head Injury Event – All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
Within last month	14	3.6%	1	0.7%	15	2.8%
Within one to six months	41	10.6%	19	12.8%	60	11.2%
Within six months to one year	97	25.0%	43	29.1%	140	26.1%
Over one year	236	60.8%	85	57.4%	321	59.9%
TOTAL	388	100.0%	148	100.0%	536	100.0%

Table 2.14 Number of Previous Concussions for Athletes Reporting Previous Concussion after Head Injury Event – All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
1 concussion	262	67.5%	108	73.0%	370	69.0%
2 concussions	63	16.2%	25	16.9%	88	16.4%
3 concussions	24	6.2%	3	2.0%	27	5.0%
≥4 concussions	12	3.1%	3	2.0%	15	2.8%
Not specified	27	7.0%	9	6.1%	36	6.7%
TOTAL	388	100.0%	148	100.0%	536	100.0%

Table 2.15 Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Event Occurred - All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
Received written authorization to return by the end of season	175		75		251	
Did not receive written authorization to return by the end of season	6	82.4%	6	80.7%	2	81.9%
Follow-up Report not completed	341	16.0%	13		472	15.4%
	1		1	14.0%		
	34	1.6%	50	5.3%	84	2.7%
TOTAL	213	100.0	93	100.0	306	100.0
	1	%	7	%	8	%

Table 2.16 Head Injuries by Medical Examiner Authorizing Return to Activity - All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
MD	894	42.0%	385	41.1%	1279	41.7%
DO	363	17.0%	139	14.8%	502	16.4%
PA	234	11.0%	94	10.0%	328	10.7%
NP	266	12.5%	138	14.7%	404	13.2%
Medical examiner data not available*	374	17.6%	181	19.3%	555	18.1%
TOTAL	2131	100.0%	937	100.0%	3068	100.0%

Table 2.17 Head Injuries by Facility where Medical Examiner Authorized Return to Activity - All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
Hospital	74	3.5%	26	2.8%	100	3.3%
Urgent or Ready Care business	215	10.1%	66	7.0%	281	9.2%
Primary care physician or pediatrician's office	1111	52.1%	527	56.2%	1638	53.4%
Neurologist's office	87	4.1%	31	3.3%	118	3.8%
Team doctor	270	12.7%	106	11.3%	376	12.3%
Medical facility data not available*	374	17.6%	181	19.3%	555	18.1%
TOTAL	2131	100.0%	937	100.0%	3068	100.0%

Table 2.18 Head Injuries by Clearance Return to Activity Conditions - All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
Unconditional return	1624	76.2%	692	73.9%	2316	75.5%
Conditions to return	133	6.2%	64	6.8%	197	6.4%
Return to activity data not available*	374	17.6%	181	19.3%	555	18.1%
TOTAL	2131	100.0%	937	100.0%	3068	100.0%

Table 2.19 Head Injuries by Missed School Days after Injury Event Date - All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
0 Days	1182	55.5%	471	50.3%	1653	53.9%
1-2 Days	433	20.3%	210	22.4%	643	21.0%
3-6 Days	101	4.7%	58	6.2%	159	5.2%
7-9 Days	18	0.8%	7	0.7%	25	0.8%
10-20 Days	21	1.0%	8	0.9%	29	0.9%
≥21 Days	2	0.1%	2	0.2%	4	0.1%
Missed school data not available*	374	17.6%	181	19.3%	555	18.1%
TOTAL	2131	100.0%	937	100.0%	3068	100.0%

Table 2.20 Head Injuries by Time between Injury Event Date and Authorization Date to Return - All MHSAA High School Sports Included, MHSAA Head Injury Reporting System, 2024-25 School Year

	Boys		Girls		Overall	
	n	%	n	%	n	%
1-2 Days	20	0.9%	24	2.6%	44	1.4%
3-5 Days	155	7.3%	51	5.4%	206	6.7%
6-10 Days	515	24.2%	232	24.8%	747	24.3%
11-15 Days	558	26.2%	188	20.1%	746	24.3%
16-20 Days	214	10.0%	117	12.5%	331	10.8%
≥21 Days	263	12.3%	128	13.7%	391	12.7%
Data not available**	406	19.1%	197	21.0%	603	19.7%
TOTAL	2131	100.0%	937	100.0%	3068	100.0%

84 Missing Follow-up Reports*

472 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

47 Data entry errors**

III. Baseball Head Injury Reports

Table 3.1 Head Injury Prevalence Rate for Baseball, MHSAA Head Injury Reporting System, 2024-25 School Year

Baseball Participation	16,057
All Baseball Head Injuries	41
Baseball Head Injury Prevalence Rate (reported head injuries/total participants)	0.26%
Baseball Head Injury Prevalence Rate Per Thousand Participants	3

Table 3.2 Baseball Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	29	70.7%
Junior Varsity	10	24.4%
Freshman	2	4.9%
TOTAL	41	100.0%

Table 3.3 Baseball Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	19	46.3%
Competition	22	53.7%
TOTAL	41	100.0%

Table 3.4 Baseball Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	1	5.3%
Middle of practice	11	57.9%
End of practice	7	36.8%
PRACTICE TOTAL	19	100.0%
Start of competition	7	31.8%
Middle of competition	10	45.5%
End of competition	5	22.7%
COMPETITION TOTAL	22	100.0%

Table 3.5 Activity Type for All Baseball Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	18	94.7%
During simulated competition-scrimmage	1	5.3%
Not specified	0	0.0%
TOTAL	19	100.0%

Table 3.6, Injury Occurred While Playing on Offense, Defense, or Special Teams for Baseball Head Injuries, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Offense	7	17.1%
Defense	12	29.3%
Special Teams	0	0.0%
Unknown	3	7.3%
Not Applicable	19	46.3%
TOTAL	41	100.0%

Table 3.7 Baseball Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	11	26.8%
Person to object contact (e.g. wall, equipment)	29	70.7%
Person to playing surface contact	1	2.4%
Uncertain as to the cause of the event	0	0.0%
TOTAL	41	100.0%

Table 3.8 Person to Playing Surface Contact Baseball Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Wooden gym floor	1	100.0%
TOTAL	1	100.0%

Table 3.9 Baseball Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Natural grass	13	31.7%
Baseball field	9	22.0%
Artificial turf	6	14.6%
Wooden gym floor	6	14.6%
Dirt	5	12.2%
Other	2	4.9%
TOTAL	41	100.0%

Table 3.10 Baseball Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	11	26.8%
Coach	13	31.7%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	1	2.4%
Not initially examined at the time of the suspected head injury	3	7.3%
Multiple examiners	13	31.7%
TOTAL	41	100.0%

Table 3.11 Baseball Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	34	82.9%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	7	17.1%
TOTAL	41	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 3.12 Baseball Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	9	22.0%
No reported previous concussions	32	78.0%
TOTAL	41	100.0%

Table 3.13 Most Recent Concussion for Baseball Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	2	22.2%
Over one year	7	77.8%
TOTAL	9	100.0%

Table 3.14 Number of Previous Concussions for Baseball Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	4	44.4%
2 concussions	4	44.4%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	1	11.1%
TOTAL	9	100.0%

Table 3.15 Baseball Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	29	70.7%
Did not receive written authorization to return by the end of season	9	22.0%
Follow-up Report not completed	3	7.3%
TOTAL	41	100.0%

Table 3.16 Baseball Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	19	46.3%
DO	1	2.4%
PA	4	9.8%
NP	5	12.2%
Medical examiner data not available*	12	29.3%
TOTAL	41	100.0%

Table 3.17 Baseball Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	1	2.4%
Urgent or Ready Care business	2	4.9%
Primary care physician or pediatrician's office	21	51.2%
Neurologist's office	3	7.3%
Team doctor	2	4.9%
Medical facility data not available*	12	29.3%
TOTAL	41	100.0%

Table 3.18 Baseball Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	29	70.7%
Conditions to return	0	0.0%
Return to activity data not available*	12	29.3%
TOTAL	41	100.0%

Table 3.19 Baseball Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	13	31.7%
1-2 Days	11	26.8%
3-6 Days	5	12.2%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	12	29.3%
TOTAL	41	100.0%

Table 3.20 Baseball Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	1	2.4%
6-10 Days	15	36.6%
11-15 Days	5	12.2%
16-20 Days	2	4.9%
≥21 Days	6	14.6%
Data not available**	12	29.3%
TOTAL	41	100.0%

3 Missing Follow-up Reports*

9 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

IV. Boys Basketball Head Injury Reports

Table 4.1 Head Injury Prevalence Rate for Boys Basketball, MHSAA Head Injury Reporting System, 2024-25 School Year

Boys Basketball Participation	20,541
All Reported Boys Basketball Head Injuries	133
Boys Basketball Head Injury Prevalence Rate (reported head injuries/total participants)	0.65%
Boys Basketball Head Injury Prevalence Rate Per Thousand Participants	6

Table 4.2 Boys Basketball Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	54	40.6%
Junior Varsity	48	36.1%
Freshman	31	23.3%
TOTAL	133	100.0%

Table 4.3 Boys Basketball Head Injuries by Gender, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Male	133	100.0%
Female	0	0.0%
TOTAL	133	100.0%

Table 4.4 Boys Basketball Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	40	30.1%
Competition	93	69.9%
TOTAL	133	100.0%

Table 4.5 Boys Basketball Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	4	10.0%
Middle of practice	20	50.0%
End of practice	16	40.0%
PRACTICE TOTAL	40	100.0%
Start of competition	6	6.5%
Middle of competition	44	47.3%
End of competition	43	46.2%
COMPETITION TOTAL	93	100.0%

Table 4.6 Activity Type for Boys Basketball Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	22	55.0%
During simulated competition-scrimmage	15	37.5%
Not specified	3	7.5%
TOTAL	40	100.0%

Table 4.7 Injury Occurred While Playing Offense, Defense, or Special Teams for Boys Basketball Head Injuries, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Offense	12	9.0%
Defense	32	24.1%
Special Teams	0	0.0%
Unknown	52	39.1%
Not Applicable	37	27.8%
TOTAL	133	100.0%

Table 4.8 Boys Basketball Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	71	53.4%
Person to object contact (e.g. wall, equipment)	5	3.8%
Person to playing surface contact	51	38.3%
Uncertain as to the cause of the event	6	4.5%
TOTAL	133	100.0%

Table 4.9 Person to Playing Surface Contact Boys Basketball Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Wooden gym floor	33	64.7%
Basketball court	18	35.3%
Gym	0	0.0%
Gym floor	0	0.0%
TOTAL	51	100.0%

Table 4.10 Boys Basketball Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Wooden gym floor	85	63.9%
Basketball court	44	33.1%
Other	4	3.0%
TOTAL	133	100.0%

Table 4.11 Boys Basketball Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	61	45.9%
Coach	24	18.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	1	0.8%
PA	0	0.0%
NP	1	0.8%
Athletic director	3	2.3%
NOT initially examined at the time of the suspected head injury	24	18.0%
Multiple examiners	19	14.3%
TOTAL	133	100.0%

Table 4.12 Athlete Removal from Activity at the Time of Injury Event – Boys Basketball Head Injuries, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	108	81.2%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	5	3.8%
NOT removed from activity at the time of the injury event*	20	15.0%
TOTAL	133	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 4.13 Boys Basketball Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	20	15.0%
No reported previous concussions	113	85.0%
TOTAL	133	100.0%

Table 4.14 Most Recent Concussion for Boys Basketball Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	5	25.0%
Within six months to one year	4	20.0%
Over one year	11	55.0%
TOTAL	20	100.0%

Table 4.15 Number of Previous Concussions for Boys Basketball Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	14	70.0%
2 concussions	3	15.0%
3 concussions	0	0.0%
≥4 concussions	1	5.0%
Not specified	2	10.0%
TOTAL	20	100.0%

Table 4.16 Boys Basketball Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	117	88.0%
Did not receive written authorization to return by the end of season	14	10.5%
Follow-up Report not completed	2	1.5%
TOTAL	133	100.0%

Table 4.17 Boys Basketball Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	54	40.6%
DO	27	20.3%
PA	23	17.3%
NP	13	9.8%
Medical examiner data not available*	16	12.0%
TOTAL	133	100.0%

Table 4.18 Boys Basketball Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	7	5.3%
Urgent or Ready Care business	13	9.8%
Primary care physician or pediatrician's office	72	54.1%
Neurologist's office	6	4.5%
Team doctor	19	14.3%
Medical facility data not available*	16	12.0%
TOTAL	133	100.0%

Table 4.19 Boys Basketball Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	107	80.5%
Conditions to return	10	7.5%
Return to activity data not available*	16	12.0%
TOTAL	133	100.0%

Table 4.20 Boys Basketball Head Injuries by Missed School Days After Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	74	55.6%
1-2 Days	33	24.8%
3-6 Days	8	6.0%
7-9 Days	0	0.0%
10-20 Days	2	1.5%
≥21 Days	0	0.0%
Missed school data not available*	16	12.0%
TOTAL	133	100.0%

Table 4.21 Boys Basketball Head Injuries by Time Between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	17	12.8%
6-10 Days	41	30.8%
11-15 Days	31	23.3%
16-20 Days	6	4.5%
≥21 Days	19	14.3%
Data not available**	19	14.3%
TOTAL	133	100.0%

2 Missing Follow-up Reports*

14 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

3 Data entry errors**

V. Girls Basketball Head Injury Reports

Table 5.1 Head Injury Prevalence Rate for Girls Basketball, MHSAA Head Injury Reporting System, 2024-25 School Year

Girls Basketball Participation	13,063
All Reported Girls Basketball Head Injuries	239
Girls Basketball Head Injury Prevalence Rate (reported head injuries/total participants)	1.83%
Girls Basketball Head Injury Prevalence Rate Per Thousand Participants	18

Table 5.2 Girls Basketball Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	122	51.0%
Junior Varsity	104	43.5%
Freshman	13	5.4%
TOTAL	239	100.0%

Table 5.3 Girls Basketball Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	43	18.0%
Competition	196	82.0%
TOTAL	239	100.0%

Table 5.4 Girls Basketball Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	6	14.0%
Middle of practice	29	67.4%
End of practice	8	18.6%
PRACTICE TOTAL	43	100.0%
Start of competition	13	6.6%
Middle of competition	102	52.0%
End of competition	81	41.3%
COMPETITION TOTAL	196	100.0%

Table 5.5 Activity Type for Girls Basketball Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	21	48.8%
During simulated competition-scrimmage	19	44.2%
Not specified	3	7.0%
TOTAL	43	100.0%

Table 5.6 Injury Occurred While Playing Offense, Defense, or Special Teams for Boys Basketball Head Injuries, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Offense	23	9.6%
Defense	49	20.5%
Special Teams	0	0.0%
Unknown	76	31.8%
Not Applicable	91	38.1%
TOTAL	239	100.0%

Table 5.7 Girls Basketball Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	108	45.2%
Person to object contact (e.g. wall, equipment)	21	8.8%
Person to playing surface contact	97	40.6%
Uncertain as to the cause of the event	13	5.4%
TOTAL	239	100.0%

Table 5.8 Person to Playing Surface Contact Girls Basketball Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Wooden gym floor	36	37.1%
Basketball court	28	28.9%
Gym floor	29	29.9%
Gymnasium	0	0.0%
Concrete	0	0.0%
TOTAL	97	100.0%

Table 5.9 Girls Basketball Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Wooden gym floor	85	35.6%
Basketball court	68	28.5%
Gym floor	70	29.3%
Wall	1	0.4%
Floor	2	0.8%
Unknown/indiscernible surface data	13	5.4%
TOTAL	239	100.0%

Table 5.10 Girls Basketball Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	125	52.3%
Coach	33	13.8%
Sideline emergency personnel	1	0.4%
Other appropriate health care professional	2	0.8%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	2	0.8%
NOT initially examined at the time of the suspected head injury	40	16.7%
Multiple examiners	36	15.1%
TOTAL	239	100.0%

Table 5.11 Girls Basketball Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	183	76.6%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	2	0.8%
NOT removed from activity at the time of the injury event*	54	22.6%
TOTAL	239	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 5.12 Girls Basketball Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	46	19.2%
No reported previous concussions	193	80.8%
TOTAL	239	100.0%

Table 5.13 Most Recent Concussion for Girls Basketball Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	7	15.2%
Within six months to one year	14	30.4%
Over one year	25	54.3%
TOTAL	46	100.0%

Table 5.14 Number of Previous Concussions for Girls Basketball Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	32	69.6%
2 concussions	12	26.1%
3 concussions	0	0.0%
≥4 concussions	1	2.2%
Not specified	1	2.2%
TOTAL	46	100.0%

Table 5.15 Girls Basketball Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	208	87.0%
Did not receive written authorization to return by the end of season	27	11.3%
Follow-up Report not completed	4	1.7%
TOTAL	239	100.0%

Table 5.16 Girls Basketball Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	109	45.6%
DO	38	15.9%
PA	33	13.8%
NP	28	11.7%
Medical examiner data not available*	31	13.0%
TOTAL	239	100.0%

Table 5.17 Girls Basketball Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	11	4.6%
Urgent or Ready Care business	20	8.4%
Primary care physician or pediatrician's office	144	60.3%
Neurologist's office	11	4.6%
Team doctor	22	9.2%
Medical facility data not available*	31	13.0%
TOTAL	239	100.0%

Table 5.18 Girls Basketball Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	189	79.1%
Conditions to return	19	7.9%
Return to activity data not available*	31	13.0%
TOTAL	239	100.0%

Table 5.19 Girls Basketball Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	118	49.4%
1-2 Days	57	23.8%
3-6 Days	25	10.5%
7-9 Days	3	1.3%
10-20 Days	4	1.7%
≥21 Days	1	0.4%
Missed school data not available*	31	13.0%
TOTAL	239	100.0%

Table 5.20 Girls Basketball Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	6	2.5%
3-5 Days	15	6.3%
6-10 Days	50	20.9%
11-15 Days	49	20.5%
16-20 Days	36	15.1%
≥21 Days	50	20.9%
Data not available**	33	13.8%
TOTAL	239	100.0%

4 Missing Follow-up Reports*

27 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

2 Data entry errors**

VI. Boys Bowling Head Injury Reports

Table 6.1 Head Injury Prevalence Rate for Boys Bowling, MHSAA Head Injury Reporting System, 2024-25 School Year

Boys Bowling Participation	4,333
All Reported Boys Bowling Head Injuries	0
Boys Bowling Head Injury Prevalence Rate (reported head injuries/total participants)	0.00%
Boys Bowling Head Injury Prevalence Rate Per Thousand Participants	0

Table 6.2 Boys Bowling Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	0	0.0%
Junior Varsity	0	0.0%
Freshman	0	0.0%
TOTAL	0	0.0%

Table 6.3 Boys Bowling Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	0	0.0%
Competition	0	0.0%
TOTAL	0	0.0%

Table 6.4 Boys Bowling Head Injuries by Time During Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	0	0.0%
End of practice	0	0.0%
PRACTICE TOTAL	0	0.0%
Start of competition	0	0.0%
Middle of competition	0	0.0%
End of competition	0	0.0%
COMPETITION TOTAL	0	0.0%

Table 6.5 Activity Type for Boys Bowling Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	0	0.0%
During simulated competition-scrimmage	0	0.0%
Not specified	0	0.0%
TOTAL	0	0.0%

Table 6.6 Boys Bowling Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	0	0.0%
Person to object contact (e.g. wall, equipment)	0	0.0%
Person to playing surface contact	0	0.0%
Uncertain as to the cause of the event	0	0.0%
TOTAL	0	0.0%

Table 6.7 Person to Playing Surface Contact Boys Bowling Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Wooden floor	0	0.0%
TOTAL	0	0.0%

Table 6.8 Person to Playing Surface Contact Boys Bowling Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Wooden floor	0	0.0%
TOTAL	0	0.0%

Table 6.9 Boys Bowling Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	0	0.0%
Coach	0	0.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	0	0.0%
Multiple examiners	0	0.0%
TOTAL	0	0.0%

Table 6.10 Boys Bowling Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	0	0.0%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	0	0.0%
TOTAL	0	0.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 6.11 Boys Bowling Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	0	0.0%
No reported previous concussions	0	0.0%
TOTAL	0	0.0%

Table 6.12 Most Recent Concussion for Boys Bowling Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	0	0.0%
TOTAL	0	0.0%

Table 6.13 Number of Previous Concussions for Boys Bowling Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	0	0.0%
TOTAL	0	0.0%

Table 6.14 Boys Bowling Head Injuries by Athlete Clearance to Return to Activity Before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	0	0.0%
Did not receive written authorization to return by the end of season	0	0.0%
Follow-up Report not completed	0	0.0%
TOTAL	0	0.0%

Table 6.15 Boys Bowling Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	0	0.0%
DO	0	0.0%
PA	0	0.0%
NP	0	0.0%
Medical examiner data not available*	0	0.0%
TOTAL	0	0.0%

Table 6.16 Boys Bowling Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	0	0.0%
Urgent or Ready Care business	0	0.0%
Primary care physician or pediatrician's office	0	0.0%
Neurologist's office	0	0.0%
Team doctor	0	0.0%
Medical facility data not available*	0	0.0%
TOTAL	0	0.0%

Table 6.17 Boys Bowling Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	0	0.0%
Conditions to return	0	0.0%
Return to activity data not available*	0	0.0%
TOTAL	0	0.0%

Table 6.18 Boys Bowling Head Injuries by Missed School Days After Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	0	0.0%
1-2 Days	0	0.0%
3-6 Days	0	0.0%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	0	0.0%
TOTAL	0	0.0%

Table 6.19 Boys Bowling Head Injuries by Time Between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	0	0.0%
6-10 Days	0	0.0%
11-15 Days	0	0.0%
16-20 Days	0	0.0%
≥21 Days	0	0.0%
Data not available**	0	0.0%
TOTAL	0	0.0%

0 Missing Follow-up Reports*

0 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

VII. Girls Bowling Head Injury Reports

Table 7.1 Head Injury Prevalence Rate for Girls Bowling, MHSAA Head Injury Reporting System, 2024-25 School Year

Girls Bowling Participation	2,689
All Reported Girls Bowling Head Injuries	1
Girls Bowling Head Injury Prevalence Rate (reported head injuries/total participants)	0.04%
Girls Bowling Head Injury Prevalence Rate Per Thousand Participants	0

Table 7.2 Girls Bowling Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	1	0.0%
Junior Varsity	0	0.0%
Freshman	0	0.0%
TOTAL	1	0.0%

Table 7.3 Girls Bowling Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	1	0.0%
Competition	0	0.0%
TOTAL	1	0.0%

Table 7.4 Girls Bowling Head Injuries by Time During Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	0	0.0%
End of practice	1	100.0%
PRACTICE TOTAL	1	100.0%
Start of competition	0	0.0%
Middle of competition	0	0.0%
End of competition	0	0.0%
COMPETITION TOTAL	0	0.0%

Table 7.5 Activity Type for Girls Bowling Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	1	100.0%
During simulated competition-scrimmage	0	0.0%
Not specified	0	0.0%
TOTAL	1	100.0%

Table 7.6 Girls Bowling Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	0	0.0%
Person to object contact (e.g. wall, equipment)	1	0.0%
Person to playing surface contact	0	0.0%
Uncertain as to the cause of the event	0	0.0%
TOTAL	1	0.0%

Table 7.7 Person to Playing Surface Contact Girls Bowling Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hardwood floor	0	0.0%
TOTAL	0	0.0%

Table 7.8 Person to Playing Surface Contact Girls Bowling Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hardwood floor	1	100.0%
Unknown/indiscernible surface data	0	0.0%
TOTAL	1	100.0%

Table 7.9 Girls Bowling Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	1	100.0%
Coach	0	0.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Multiple examiners	0	0.0%
TOTAL	1	100.0%

Table 7.10 Girls Bowling Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	1	100.0%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	0	0.0%
TOTAL	1	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 7.11 Girls Bowling Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	1	0.0%
No reported previous concussions	0	0.0%
TOTAL	1	0.0%

Table 7.12 Most Recent Concussion for Girls Bowling Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	1	0.0%
TOTAL	1	0.0%

Table 7.13 Number of Previous Concussions for Girls Bowling Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	1	0.0%
2 concussions	0	0.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	1	0.0%

Table 7.14 Girls Bowling Head Injuries by Athlete Clearance to Return to Activity Before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	1	0.0%
Did not receive written authorization to return by the end of season	0	0.0%
Follow-up Report not completed	0	0.0%
TOTAL	1	0.0%

Table 7.15 Girls Bowling Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	1	0.0%
DO	0	0.0%
PA	0	0.0%
NP	0	0.0%
Medical examiner data not available*	0	0.0%
TOTAL	1	0.0%

Table 7.16 Girls Bowling Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	0	0.0%
Urgent or Ready Care business	0	0.0%
Primary care physician or pediatrician's office	1	0.0%
Neurologist's office	0	0.0%
Team doctor	0	0.0%
Medical facility data not available*	0	0.0%
TOTAL	1	0.0%

Table 7.17 Girls Bowling Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	0	0.0%
Conditions to return	1	0.0%
Return to activity data not available*	0	0.0%
TOTAL	1	0.0%

Table 7.18 Girls Bowling Head Injuries by Missed School Days After Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	0	0.0%
1-2 Days	1	0.0%
3-6 Days	0	0.0%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	0	0.0%
TOTAL	1	0.0%

Table 7.19 Girls Bowling Head Injuries by Time Between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	0	0.0%
6-10 Days	0	0.0%
11-15 Days	1	0.0%
16-20 Days	0	0.0%
≥21 Days	0	0.0%
Data not available**	0	0.0%
TOTAL	1	0.0%

0 Missing Follow-up Reports*

0 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

VIII. Competitive Cheer Head Injury Reports

Table 8.1 Head Injury Prevalence Rate for Competitive Cheer, MHSAA Head Injury Reporting System, 2024-25 School Year

Competitive Cheer Participation	6,319
All Reported Competitive Cheer Head Injuries	68
Competitive Cheer Head Injury Prevalence Rate (reported head injuries/total participants)	1.08%
Competitive Cheer Head Injury Prevalence Rate Per Thousand Participants	11

Table 8.2 Competitive Cheer Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	59	86.8%
Junior Varsity	9	13.2%
Freshman	0	0.0%
TOTAL	68	100.0%

Table 8.3 Competitive Cheer Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	60	88.2%
Competition	8	11.8%
TOTAL	68	100.0%

Table 8.4 Competitive Cheer Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	3	5.0%
Middle of practice	31	51.7%
End of practice	26	43.3%
PRACTICE TOTAL	60	100.0%
Start of competition	1	12.5%
Middle of competition	3	37.5%
End of competition	4	50.0%
COMPETITION TOTAL	8	100.0%

Table 8.5 Activity Type for Competitive Cheer Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	45	75.0%
During simulated competition-scrimmage	15	25.0%
Not specified	0	0.0%
TOTAL	60	100.0%

Table 8.6 Competitive Cheer Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	36	52.9%
Person to object contact (e.g. wall, equipment)	5	7.4%
Person to playing surface contact	22	32.4%
Uncertain as to the cause of the event	5	7.4%
TOTAL	68	100.0%

Table 8.7 Person to Playing Surface Contact Competitive Cheer Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Cheer mat	17	77.3%
Athletic mat	3	13.6%
Padded flooring	1	4.5%
Tumbling mat	1	4.5%
TOTAL	22	100.0%

Table 8.7 Competitive Cheer Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Cheer mat	51	75.0%
Athletic mat	5	7.4%
Tumbling mat	3	4.4%
Padded flooring	1	1.5%
Gym floor	1	1.5%
Wrestling-Type Mat	1	1.5%
Other	6	8.8%
TOTAL	68	100.0%

Table 8.8 Competitive Cheer Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	27	39.7%
Coach	12	17.6%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	2	2.9%
PA	0	0.0%
NP	0	0.0%
Athletic director	1	1.5%
Not initially examined at the time of the suspected head injury	20	29.4%
Multiple examiners	6	8.8%
TOTAL	68	100.0%

Table 8.9 Competitive Cheer Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	43	63.2%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	2	2.9%
NOT removed from activity at the time of the injury event*	23	33.8%
TOTAL	68	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 8.10 Competitive Cheer Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	7	10.3%
No reported previous concussions	61	89.7%
TOTAL	68	100.0%

Table 8.11 Most Recent Concussion for Competitive Cheer Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	2	28.6%
Within six months to one year	2	28.6%
Over one year	3	42.9%
TOTAL	7	100.0%

Table 8.12 Number of Previous Concussions for Competitive Cheer Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	5	71.4%
2 concussions	2	28.6%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	7	100.0%

Table 8.13 Competitive Cheer Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	61	89.7%
Did not receive written authorization to return by the end of season	6	8.8%
Follow-up Report not completed	1	1.5%
TOTAL	68	100.0%

Table 8.14 Competitive Cheer Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	27	39.7%
DO	13	19.1%
PA	9	13.2%
NP	12	17.6%
Medical examiner data not available*	7	10.3%
TOTAL	68	100.0%

Table 8.15 Competitive Cheer Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	1	1.5%
Urgent or Ready Care business	9	13.2%
Primary care physician or pediatrician's office	41	60.3%
Neurologist's office	1	1.5%
Team doctor	9	13.2%
Medical facility data not available*	7	10.3%
TOTAL	68	100.0%

Table 8.16 Competitive Cheer Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	55	80.9%
Conditions to return	6	8.8%
Return to activity data not available*	7	10.3%
TOTAL	68	100.0%

Table 8.17 Competitive Cheer Head Injuries by Missed School Days After Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	41	60.3%
1-2 Days	13	19.1%
3-6 Days	5	7.4%
7-9 Days	1	1.5%
10-20 Days	1	1.5%
≥21 Days	0	0.0%
Missed school data not available*	7	10.3%
TOTAL	68	100.0%

Table 8.18 Competitive Cheer Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	1	1.5%
3-5 Days	3	4.4%
6-10 Days	14	20.6%
11-15 Days	8	11.8%
16-20 Days	15	22.1%
≥21 Days	18	26.5%
Data not available**	9	13.2%
TOTAL	68	100.0%

1 Missing Follow-up Reports*

6 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

2 Data entry errors**

IX. Boys Cross Country Head Injury Reports

Table 9.1 Head Injury Prevalence Rate for Boys Cross Country, MHSAA Head Injury Reporting System, 2023-24 School Year

Boys Cross Country Participation	8,209
All Reported Boys Cross Country Head Injuries	0
Boys Cross Country Head Injury Prevalence Rate (reported head injuries/total participants)	0.00%
Boys Cross Country Head Injury Prevalence Rate Per Thousand Participants	0

Table 9.2 Boys Cross Country Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
Varsity	0	0.0%
Junior Varsity	0	0.0%
Freshman	0	0.0%
TOTAL	0	0.0%

Table 9.3 Boys Cross Country Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
Practice	0	0.0%
Competition	0	0.0%
TOTAL	0	0.0%

Table 9.4 Boys Cross Country Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	0	0.0%
End of practice	0	0.0%
PRACTICE TOTAL	0	0.0%
Start of competition	0	0.0%
Middle of competition	0	0.0%
End of competition	0	0.0%
COMPETITION TOTAL	0	0.0%

Table 9.5 Activity Type for Boys Cross Country Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
During a drill	0	0.0%
During simulated competition-scrimmage	0	0.0%
Not specified	0	0.0%
TOTAL	0	0.0%

Table 9.6 Boys Cross Country Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
Person to person contact	0	0.0%
Person to object contact (e.g. wall, equipment)	0	0.0%
Person to playing surface contact	0	0.0%
Uncertain as to the cause of the event	0	0.0%
TOTAL	0	0.0%

Table 9.7 Person to Playing Surface Contact Boys Cross Country Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
Ground	0	0.0%
TOTAL	0	0.0%

Table 9.8 Person to Playing Surface Contact Boys Cross Country Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
Ground	0	0.0%
TOTAL	0	0.0%

Table 9.9 Boys Cross Country Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
Athletic trainer	0	0.0%
Coach	0	0.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	0	0.0%
Multiple examiners	0	0.0%
TOTAL	0	0.0%

Table 9.10 Boys Cross Country Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	0	0.0%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	0	0.0%
TOTAL	0	0.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 9.11 Boys Cross Country Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
Reported at least one previous concussion	0	0.0%
No reported previous concussions	0	0.0%
TOTAL	0	0.0%

Table 9.12 Most Recent Concussion for Boys Cross Country Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	0	0.0%
TOTAL	0	0.0%

Table 9.13 Number of Previous Concussions for Boys Cross Country Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	0	0.0%
TOTAL	0	0.0%

Table 9.14 Boys Cross Country Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
Received written authorization to return by the end of season	0	0.0%
Did not receive written authorization to return by the end of season	0	0.0%
Follow-up Report not completed	0	0.0%
TOTAL	0	0.0%

Table 9.15 Boys Cross Country Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
MD	0	0.0%
DO	0	0.0%
PA	0	0.0%
NP	0	0.0%
Medical examiner data not available*	0	0.0%
TOTAL	0	0.0%

Table 9.16 Boys Cross Country Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
Hospital	0	0.0%
Urgent or Ready Care business	0	0.0%
Primary care physician or pediatrician's office	0	0.0%
Neurologist's office	0	0.0%
Team doctor	0	0.0%
Medical facility data not available*	0	0.0%
TOTAL	0	0.0%

Table 9.17 Boys Cross Country Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
Unconditional return	0	0.0%
Conditions to return	0	0.0%
Return to activity data not available*	0	0.0%
TOTAL	0	0.0%

Table 9.18 Boys Cross Country Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
0 Days	0	0.0%
1-2 Days	0	0.0%
3-6 Days	0	0.0%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	0	0.0%
TOTAL	0	0.0%

Table 9.19 Boys Cross Country Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2023-24 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	0	0.0%
6-10 Days	0	0.0%
11-15 Days	0	0.0%
16-20 Days	0	0.0%
≥21 Days	0	0.0%
Data not available**	0	0.0%
TOTAL	0	0.0%

0 Missing Follow-up Reports*

0 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

X. Girls Cross Country Head Injury Reports

Table 10.1 Head Injury Prevalence Rate for Girls Cross Country, MHSAA Head Injury Reporting System, 2024-25 School Year

Girls Cross Country Participation	6,826
All Reported Girls Cross Country Head Injuries	4
Girls Cross Country Head Injury Prevalence Rate (reported head injuries/total participants)	0.06%
Girls Cross Country Head Injury Prevalence Rate Per Thousand Participants	1

Table 10.2 Girls Cross Country Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	4	100.0%
Junior Varsity	0	0.0%
Freshman	0	0.0%
TOTAL	4	100.0%

Table 10.3 Girls Cross Country Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	2	50.0%
Competition	2	50.0%
TOTAL	4	100.0%

Table 10.4 Girls Cross Country Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	1	50.0%
Middle of practice	1	50.0%
End of practice	0	0.0%
PRACTICE TOTAL	2	100.0%
Start of competition	0	0.0%
Middle of competition	0	0.0%
End of competition	2	50.0%
COMPETITION TOTAL	2	50.0%

Table 10.5 Activity Type for Girls Cross Country Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	2	100.0%
During simulated competition-scrimmage	0	0.0%
Not specified	0	0.0%
TOTAL	2	100.0%

Table 10.6 Girls Cross Country Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	1	25.0%
Person to object contact (e.g. wall, equipment)	1	25.0%
Person to playing surface contact	2	50.0%
Uncertain as to the cause of the event	0	0.0%
TOTAL	4	100.0%

Table 10.7 Person to Playing Surface Contact Girls Cross Country Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Artificial turf	1	50.0%
Concrete	1	50.0%
TOTAL	2	100.0%

Table 10.8 Girls Cross Country Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Artificial turf	2	50.0%
Concrete	1	25.0%
Track	1	25.0%
TOTAL	4	100.0%

Table 10.9 Girls Cross Country Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	1	25.0%
Coach	1	25.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	1	25.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	1	25.0%
Multiple examiners	0	0.0%
TOTAL	4	100.0%

Table 10.10 Girls Cross Country Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	3	75.0%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	1	25.0%
TOTAL	4	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 10.11 Girls Cross Country Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	1	25.0%
No reported previous concussions	3	75.0%
TOTAL	4	100.0%

Table 10.12 Most Recent Concussion for Girls Cross Country Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	1	100.0%
TOTAL	1	100.0%

Table 10.13 Number of Previous Concussions for Girls Cross Country Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	1	100.0%
2 concussions	0	0.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	1	100.0%

Table 10.14 Girls Cross Country Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	1	25.0%
Did not receive written authorization to return by the end of season	3	75.0%
Follow-up Report not completed	0	0.0%
TOTAL	4	100.0%

Table 10.15 Girls Cross Country Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	1	25.0%
DO	0	0.0%
PA	0	0.0%
NP	0	0.0%
Medical examiner data not available*	3	75.0%
TOTAL	4	100.0%

Table 10.16 Girls Cross Country Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	0	0.0%
Urgent or Ready Care business	0	0.0%
Primary care physician or pediatrician's office	1	25.0%
Neurologist's office	0	0.0%
Team doctor	0	0.0%
Medical facility data not available*	3	75.0%
TOTAL	4	100.0%

Table 10.17 Girls Cross Country Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	1	25.0%
Conditions to return	0	0.0%
Return to activity data not available*	3	75.0%
TOTAL	4	100.0%

Table 10.18 Girls Cross Country Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	1	25.0%
1-2 Days	0	0.0%
3-6 Days	0	0.0%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	3	75.0%
TOTAL	4	100.0%

Table 10.19 Girls Cross Country Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	0	0.0%
6-10 Days	0	0.0%
11-15 Days	1	25.0%
16-20 Days	0	0.0%
≥21 Days	0	0.0%
Data not available**	3	75.0%
TOTAL	4	100.0%

0 Missing Follow-up Reports*

3 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

XI. 11-Player Football Head Injury Reports

Table 11.1 Head Injury Prevalence Rate for 11-Player Football, MHSAA Head Injury Reporting System, 2024-25 School Year

11-Player Football Participation	33,506
All Reported 11-Player Football Head Injuries	1,309
11-Player Football Head Injury Prevalence Rate (reported head injuries/total participants)	3.91%
11-Player Football Head Injury Prevalence Rate Per Thousand Participants	39

Table 11.2 11-Player Football Head Injuries by Gender, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Male	1307	99.8%
Female	2	0.2%
TOTAL	1309	100.0%

Table 11.3 11-Player Football Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	569	43.5%
Junior Varsity	561	42.9%
Freshman	179	13.7%
TOTAL	1309	100.0%

Table 11.4 11-Player Football Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	429	32.8%
Competition	880	67.2%
TOTAL	1309	100.0%

Table 11.5 11-Player Football Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	42	9.8%
Middle of practice	246	57.3%
End of practice	141	32.9%
PRACTICE TOTAL	429	100.0%
Start of competition	84	9.5%
Middle of competition	431	49.0%
End of competition	365	41.5%
COMPETITION TOTAL	880	100.0%

Table 11.6 Activity Type for 11-Player Football Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	300	69.9%
During simulated competition-scrimmage	111	25.9%
Not specified	18	4.2%
TOTAL	429	100.0%

Table 11.7 Injury Occurred While Playing Offense, Defense, or Special Teams for 11-Player Football Head Injuries, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Offense	323	24.7%
Defense	325	24.8%
Special Teams	73	5.6%
Unknown	542	41.4%
Not Applicable	46	3.5%
TOTAL	1309	100.0%

Table 11.8 11-Player Football Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	950	72.6%
Person to object contact (e.g. wall, equipment)	11	0.8%
Person to playing surface contact	187	14.3%
Uncertain as to the cause of the event	161	12.3%
TOTAL	1309	100.0%

Table 11.9 Person to Playing Surface Contact 11-Player Football Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Natural grass	67	36.0%
Artificial turf	114	61.3%
Football field	5	2.7%
Other	0	0.0%
Concrete	0	0.0%
TOTAL	186	100.0%

Table 11.10 11-Player Football Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Natural grass	542	41.4%
Artificial turf	689	52.6%
Football field	49	3.7%
Unknown/indiscernible surface data	29	2.2%
TOTAL	1309	100.0%

Table 11.11 11-Player Football Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	715	54.6%
Coach	88	6.7%
Sideline emergency personnel	7	0.5%
Other appropriate health care professional	6	0.5%
DO	1	0.1%
MD	8	0.6%
PA	0	0.0%
NP	1	0.1%
Athletic director	6	0.5%
Not initially examined at the time of the suspected head injury	262	20.0%
Multiple examiners	215	16.4%
TOTAL	1309	100.0%

Table 11.12 11-Player Football Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	984	75.2%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	12	0.9%
NOT removed from activity at the time of the injury event*	313	23.9%
TOTAL	1309	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 11.13 11-Player Football Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	232	17.7%
No reported previous concussions	1077	82.3%
TOTAL	1309	100.0%

Table 11.14 Most Recent Concussion for 11-Player Football Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	9	3.9%
Within one to six months	20	8.6%
Within six months to one year	58	25.0%
Over one year	145	62.5%
TOTAL	232	100.0%

Table 11.15 Number of Previous Concussions for 11-Player Football Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	163	70.3%
2 concussions	35	15.1%
3 concussions	18	7.8%
≥4 concussions	2	0.9%
Not specified	14	6.0%
TOTAL	232	100.0%

Table 11.16 11-Player Football Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	1083	82.7%
Did not receive written authorization to return by the end of season	214	16.3%
Follow-up Report not completed	12	0.9%
TOTAL	1309	100.0%

Table 11.17 11-Player Football Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	560	42.8%
DO	226	17.3%
PA	136	10.4%
NP	162	12.4%
Medical examiner data not available*	225	17.2%
TOTAL	1309	100.0%

Table 11.18 11-Player Football Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	46	3.5%
Urgent or Ready Care business	139	10.6%
Primary care physician or pediatrician's office	663	50.6%
Neurologist's office	52	4.0%
Team doctor	184	14.1%
Medical facility data not available*	225	17.2%
TOTAL	1309	100.0%

Table 11.19 11-Player Football Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	995	76.0%
Conditions to return	89	6.8%
Return to activity data not available*	225	17.2%
TOTAL	1309	100.0%

Table 11.20 11-Player Football Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	758	57.9%
1-2 Days	246	18.8%
3-6 Days	50	3.8%
7-9 Days	14	1.1%
10-20 Days	14	1.1%
≥21 Days	2	0.2%
Missed school data not available*	225	17.2%
TOTAL	1309	100.0%

Table 11.21 11-Player Football Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	13	1.0%
3-5 Days	86	6.6%
6-10 Days	295	22.5%
11-15 Days	381	29.1%
16-20 Days	141	10.8%
≥21 Days	145	11.1%
Data not available**	248	18.9%
TOTAL	1309	100.0%

12 Missing Follow-up Reports*

214 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

22 Data entry errors**

XII. 8-Player Football Head Injuries Reports

Table 12.1 Head Injury Prevalence Rate for 8-Player Football, MHSAA Head Injury Reporting System, 2024-25 School Year

8-Player Football Participation	2,704
All Reported 8-Player Football Head Injuries	76
8-Player Football Head Injury Prevalence Rate (reported head injuries/total participants)	2.81%
8-Player Football Head Injury Prevalence Rate Per Thousand Participants	28

Table 12.2 8-Player Football Head Injuries by Gender, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Male	76	100.0%
Female	0	0.0%
TOTAL	76	100.0%

Table 12.3 8-Player Football Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	61	80.3%
Junior Varsity	15	19.7%
Freshman	0	0.0%
TOTAL	76	100.0%

Table 12.4 8-Player Football Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	14	18.4%
Competition	62	81.6%
TOTAL	76	100.0%

Table 12.5 8-Player Football Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	10	71.4%
End of practice	4	28.6%
PRACTICE TOTAL	14	100.0%
Start of competition	9	14.5%
Middle of competition	40	64.5%
End of competition	13	21.0%
COMPETITION TOTAL	62	100.0%

Table 12.6 Activity Type for 8-Player Football Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	7	50.0%
During simulated competition-scrimmage	5	35.7%
Not specified	2	14.3%
TOTAL	14	100.0%

Table 12.7 Injury Occurred While Playing Offense, Defense, or Special Teams for 8-Player Football Head Injuries, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Offense	23	30.3%
Defense	16	21.1%
Special Teams	8	10.5%
Unknown	28	36.8%
Not Applicable	1	1.3%
TOTAL	76	100.0%

Table 12.8 8-Player Football Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	47	61.8%
Person to object contact (e.g. wall, equipment)	0	0.0%
Person to playing surface contact	11	14.5%
Uncertain as to the cause of the event	18	23.7%
TOTAL	76	100.0%

Table 12.9 Person to Playing Surface Contact 8-Player Football Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Natural grass	5	45.5%
Artificial turf	2	18.2%
Football field	3	27.3%
Wooden gym floor	1	9.1%
TOTAL	11	100.0%

Table 12.10 8-Player Football Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Natural grass	46	60.5%
Artificial turf	18	23.7%
Football field	6	7.9%
Wooden gym floor	1	1.3%
Not specified	5	6.6%
TOTAL	76	100.0%

Table 12.11 8-Player Football Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	19	25.0%
Coach	25	32.9%
Sideline emergency personnel	2	2.6%
Other appropriate health care professional	1	1.3%
DO	0	0.0%
MD	1	1.3%
PA	0	0.0%
NP	1	1.3%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	10	13.2%
Multiple examiners	17	22.4%
TOTAL	76	100.0%

Table 12.12 8-Player Football Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	64	84.2%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	1	1.3%
NOT removed from activity at the time of the injury event*	11	14.5%
TOTAL	76	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 12.13 8-Player Football Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	16	21.1%
No reported previous concussions	60	78.9%
TOTAL	76	100.0%

Table 12.14 Most Recent Concussion for 8-Player Football Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	1	6.3%
Within six months to one year	5	31.3%
Over one year	10	62.5%
TOTAL	16	100.0%

Table 12.15 Number of Previous Concussions for 8-Player Football Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	10	62.5%
2 concussions	4	25.0%
3 concussions	0	0.0%
≥4 concussions	1	6.3%
Not specified	1	6.3%
TOTAL	16	100.0%

Table 12.16 8-Player Football Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	56	73.7%
Did not receive written authorization to return by the end of season	17	22.4%
Follow-up Report not completed	3	3.9%
TOTAL	76	100.0%

Table 12.17 8-Player Football Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	37	48.7%
DO	6	7.9%
PA	8	10.5%
NP	5	6.6%
Medical examiner data not available*	20	26.3%
TOTAL	76	100.0%

Table 12.18 8-Player Football Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	4	5.3%
Urgent or Ready Care business	8	10.5%
Primary care physician or pediatrician's office	34	44.7%
Neurologist's office	4	5.3%
Team doctor	6	7.9%
Medical facility data not available*	20	26.3%
TOTAL	76	100.0%

Table 12.19 8-Player Football Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	46	60.5%
Conditions to return	10	13.2%
Return to activity data not available*	20	26.3%
TOTAL	76	100.0%

Table 12.20 8-Player Football Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	29	38.2%
1-2 Days	17	22.4%
3-6 Days	10	13.2%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	20	26.3%
TOTAL	76	100.0%

Table 12.21 8-Player Football Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	4	5.3%
6-10 Days	14	18.4%
11-15 Days	22	28.9%
16-20 Days	4	5.3%
≥21 Days	10	13.2%
Data not available**	22	28.9%
TOTAL	76	100.0%

3 Missing Follow-up Reports*

17 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

2 Data entry errors**

XIII. Boys Golf Head Injury Reports

Table 13.1 Head Injury Prevalence Rate for Boys Golf, MHSAA Head Injury Reporting System, 2024-25 School Year

Boys Golf Participation	7,416
All Boys Golf Head Injuries	0
Boys Golf Head Injury Prevalence Rate (reported head injuries/total participants)	0.00%
Boys Golf Head Injury Prevalence Rate Per Thousand Participants	0

Table 13.2 Boys Golf Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	0	0.0%
Junior Varsity	0	0.0%
Freshman	0	0.0%
TOTAL	0	0.0%

Table 13.3 Boys Golf Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	0	0.0%
Competition	0	0.0%
TOTAL	0	0.0%

Table 13.4 Boys Golf Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	0	0.0%
End of practice	0	0.0%
PRACTICE TOTAL	0	0.0%
Start of competition	0	0.0%
Middle of competition	0	0.0%
End of competition	0	0.0%
COMPETITION TOTAL	0	0.0%

Table 13.5 Activity Type for Boys Golf Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	0	0.0%
During simulated competition-scrimmage	0	0.0%
Not specified	0	0.0%
TOTAL	0	0.0%

Table 13.6 Boys Golf Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	0	0.0%
Person to object contact (e.g. wall, equipment)	0	0.0%
Person to playing surface contact	0	0.0%
Uncertain as to the cause of the event	0	0.0%
TOTAL	0	0.0%

Table 13.7 Person to Playing Surface Contact Boys Golf Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Grass	0	0.0%
TOTAL	0	0.0%

Table 13.8 Boys Golf Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Grass	0	0.0%
TOTAL	0	0.0%

Table 13.9 Boys Golf Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	0	0.0%
Coach	0	0.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	0	0.0%
Multiple examiners	0	0.0%
TOTAL	0	0.0%

Table 13.10 Boys Golf Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	0	0.0%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	0	0.0%
TOTAL	0	0.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 13.11 Boys Golf Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	0	0.0%
No reported previous concussions	0	0.0%
TOTAL	0	0.0%

Table 13.12 Most Recent Concussion for Boys Golf Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	0	0.0%
TOTAL	0	0.0%

Table 13.13 Number of Previous Concussions for Boys Golf Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 concussion	0	0.0%
2 concussions	0	0.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	0	0.0%

Table 13.14 Boys Golf Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	0	0.0%
Did not receive written authorization to return by the end of season	0	0.0%
Follow-up Report not completed	0	0.0%
TOTAL	0	0.0%

Table 13.15 Boys Golf Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	0	0.0%
DO	0	0.0%
PA	0	0.0%
NP	0	0.0%
Medical examiner data not available*	0	0.0%
TOTAL	0	0.0%

Table 13.16 Boys Golf Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	0	0.0%
Urgent or Ready Care business	0	0.0%
Primary care physician or pediatrician's office	0	0.0%
Neurologist's office	0	0.0%
Team doctor	0	0.0%
Medical facility data not available*	0	0.0%
TOTAL	0	0.0%

Table 13.17 Boys Golf Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	0	0.0%
Conditions to return	0	0.0%
Return to activity data not available*	0	0.0%
TOTAL	0	0.0%

Table 13.18 Boys Golf Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	0	0.0%
0-2 Days	0	0.0%
3-6 Days	0	0.0%
7-9 Days	0	0.0%
00-20 Days	0	0.0%
≥20 Days	0	0.0%
Missed school data not available*	0	0.0%
TOTAL	0	0.0%

Table 13.19 Boys Golf Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0-2 Days	0	0.0%
3-5 Days	0	0.0%
6-00 Days	0	0.0%
00-05 Days	0	0.0%
06-20 Days	0	0.0%
≥20 Days	0	0.0%
Data not available**	0	0.0%
TOTAL	0	0.0%

0 Missing Follow-up Reports*

0 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

XIV. Girls Golf Head Injury Reports

Table 14.1 Head Injury Prevalence Rate for Girls Golf, MHSAA Head Injury Reporting System, 2024-25 School Year

Girls Golf Participation	3,970
All Reported Girls Golf Head Injuries	0
Girls Golf Head Injury Prevalence Rate (reported head injuries/total participants)	0.00%
Girls Golf Head Injury Prevalence Rate Per Thousand Participants	0

Table 14.2 Girls Golf Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	0	0.0%
Junior Varsity	0	0.0%
Freshman	0	0.0%
TOTAL	0	0.0%

Table 14.3 Girls Golf Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	0	0.0%
Competition	0	0.0%
TOTAL	0	0.0%

Table 14.4 Girls Golf Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	0	0.0%
End of practice	0	0.0%
PRACTICE TOTAL	0	0.0%
Start of competition	0	0.0%
Middle of competition	0	0.0%
End of competition	0	0.0%
COMPETITION TOTAL	0	0.0%

Table 14.5 Activity Type for Girls Golf Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	0	0.0%
During simulated competition-scrimmage	0	0.0%
Not specified	0	0.0%
TOTAL	0	0.0%

Table 14.6 Girls Golf Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	0	0.0%
Person to object contact (e.g. wall, equipment)	0	0.0%
Person to playing surface contact	0	0.0%
Uncertain as to the cause of the event	0	0.0%
TOTAL	0	0.0%

Table 14.7 Person to Playing Surface Contact Girls Golf Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
n/a	0	0.0%
TOTAL	0	0.0%

Table 14.8 Girls Golf Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
n/a	0	0.0%
TOTAL	0	0.0%

Table 14.9 Girls Golf Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	0	0.0%
Coach	0	0.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	0	0.0%
Multiple examiners	0	0.0%
TOTAL	0	0.0%

Table 14.10 Girls Golf Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	0	0.0%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	0	0.0%
TOTAL	0	0.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 14.11 Girls Golf Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	0	0.0%
No reported previous concussions	0	0.0%
TOTAL	0	0.0%

Table 14.12 Most Recent Concussion for Girls Golf Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	0	0.0%
TOTAL	0	0.0%

Table 14.13 Number of Previous Concussions for Girls Golf Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	0	0.0%
2 concussions	0	0.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	0	0.0%

Table 14.14 Girls Golf Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	0	0.0%
Did not receive written authorization to return by the end of season	0	0.0%
Follow-up Report not completed	0	0.0%
TOTAL	0	0.0%

Table 14.15 Girls Golf Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	0	0.0%
DO	0	0.0%
PA	0	0.0%
NP	0	0.0%
Medical examiner data not available*	0	0.0%
TOTAL	0	0.0%

Table 14.16 Girls Golf Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	0	0.0%
Urgent or Ready Care business	0	0.0%
Primary care physician or pediatrician's office	0	0.0%
Neurologist's office	0	0.0%
Team doctor	0	0.0%
Medical facility data not available*	0	0.0%
TOTAL	0	0.0%

Table 14.17 Girls Golf Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	0	0.0%
Conditions to return	0	0.0%
Return to activity data not available*	0	0.0%
TOTAL	0	0.0%

Table 14.18 Girls Golf Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	0	0.0%
1-2 Days	0	0.0%
3-6 Days	0	0.0%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	0	0.0%
TOTAL	0	0.0%

Table 14.19 Girls Golf Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	0	0.0%
6-10 Days	0	0.0%
11-15 Days	0	0.0%
16-20 Days	0	0.0%
≥21 Days	0	0.0%
Data not available**	0	0.0%
TOTAL	0	0.0%

0 Missing Follow-up Reports*

0 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

XV. Gymnastics Head Injury Reports

Table 15.1 Head Injury Prevalence Rate for Gymnastics, MHSAA Head Injury Reporting System, 2024-25 School Year

Gymnastics Participation	497
All Reported Gymnastics Head Injuries	4
Gymnastics Head Injury Prevalence Rate (reported head injuries/total participants)	0.80%
Gymnastics Head Injury Prevalence Rate Per Thousand Participants	8

Table 15.2 Gymnastics Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	4	100.0%
Junior Varsity	0	0.0%
Freshman	0	0.0%
TOTAL	4	100.0%

Table 15.3 Gymnastics Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	1	25.0%
Competition	3	75.0%
TOTAL	4	100.0%

Table 15.4 Gymnastics Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	0	0.0%
End of practice	1	100.0%
PRACTICE TOTAL	1	100.0%
Start of competition	1	33.3%
Middle of competition	1	33.3%
End of competition	1	33.3%
COMPETITION TOTAL	3	100.0%

Table 15.5 Activity Type for Gymnastics Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	1	100.0%
During simulated competition-scrimmage	0	0.0%
Not specified	0	0.0%
TOTAL	1	100.0%

Table 15.6 Gymnastics Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	0	0.0%
Person to object contact (e.g. wall, equipment)	1	25.0%
Person to playing surface contact	3	75.0%
Uncertain as to the cause of the event	0	0.0%
TOTAL	4	100.0%

Table 15.7 Person to Playing Surface Contact Gymnastics Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Gymnastics mat	1	33.3%
Gymnastics spring floor	1	33.3%
Gymnastics floor	1	33.3%
TOTAL	3	100.0%

Table 15.8 Gymnastics Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Gymnastics mat	1	25.0%
Gymnastics spring floor	2	50.0%
Gymnastics floor	1	25.0%
TOTAL	4	100.0%

Table 15.9 Gymnastics Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	2	50.0%
Coach	1	25.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	0	0.0%
Multiple examiners	1	25.0%
TOTAL	4	100.0%

Table 15.10 Gymnastics Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	3	75.0%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	1	25.0%
TOTAL	4	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 15.11 Gymnastics Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	0	0.0%
No reported previous concussions	4	100.0%
TOTAL	4	100.0%

Table 15.12 Most Recent Concussion for Gymnastics Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	0	0.0%
TOTAL	0	0.0%

Table 15.13 Number of Previous Concussions for Gymnastics Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	0	10.0%
2 concussions	0	0.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	0	0.0%

Table 15.14 Gymnastics Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	4	100.0%
Did not receive written authorization to return by the end of season	0	0.0%
Follow-up Report not completed	0	0.0%
TOTAL	4	100.0%

Table 15.15 Gymnastics Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	2	50.0%
DO	1	25.0%
PA	0	0.0%
NP	1	25.0%
Medical examiner data not available*	0	0.0%
TOTAL	4	100.0%

Table 15.16 Gymnastics Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	0	0.0%
Urgent or Ready Care business	1	25.0%
Primary care physician or pediatrician's office	2	50.0%
Neurologist's office	1	25.0%
Team doctor	0	0.0%
Medical facility data not available*	0	0.0%
TOTAL	4	100.0%

Table 15.17 Gymnastics Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	4	100.0%
Conditions to return	0	0.0%
Return to activity data not available*	0	0.0%
TOTAL	4	100.0%

Table 15.18 Gymnastics Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	2	50.0%
1-2 Days	2	50.0%
3-6 Days	0	0.0%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	0	0.0%
TOTAL	4	100.0%

Table 15.19 Gymnastics Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	0	0.0%
6-10 Days	0	0.0%
11-15 Days	3	75.0%
16-20 Days	1	25.0%
≥21 Days	0	0.0%
Data not available**	0	0.0%
TOTAL	4	100.0%

0 Missing Follow-up Reports*

0 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

XVI. Ice Hockey Head Injury Reports

Table 16.1 Head Injury Prevalence Rate for Ice Hockey, MHSAA Head Injury Reporting System, 2024-25 School Year

Ice Hockey Participation	3,107
All Reported Ice Hockey Head Injuries	62
Ice Hockey Head Injury Prevalence Rate (reported head injuries/total participants)	2.00%
Ice Hockey Head Injury Prevalence Rate Per Thousand Participants	20

Table 16.2 Ice Hockey Head Injuries by Gender, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Male	62	100.0%
Female	0	0.0%
TOTAL	62	100.0%

Table 16.3 Ice Hockey Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	57	91.9%
Junior Varsity	5	8.1%
Freshman	0	0.0%
TOTAL	62	100.0%

Table 16.4 Ice Hockey Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	13	21.0%
Competition	49	79.0%
TOTAL	62	100.0%

Table 16.5 Ice Hockey Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	1	7.7%
Middle of practice	9	69.2%
End of practice	3	23.1%
PRACTICE TOTAL	13	100.0%
Start of competition	8	16.3%
Middle of competition	26	53.1%
End of competition	15	30.6%
COMPETITION TOTAL	49	100.0%

Table 16.6 Activity Type for Ice Hockey Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	9	69.2%
During simulated competition-scrimmage	3	23.1%
Not specified	1	7.7%
TOTAL	13	100.0%

Table 16.7 Injury Occurred While Playing Offense, Defense, or Special Teams for Ice Hockey Head Injuries, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Offense	6	9.7%
Defense	13	21.0%
Special Teams	0	0.0%
Unknown	25	40.3%
Not Applicable	18	29.0%
TOTAL	62	100.0%

Table 16.8 Ice Hockey Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	27	43.5%
Person to object contact (e.g. wall, equipment)	22	35.5%
Person to playing surface contact	8	12.9%
Uncertain as to the cause of the event	5	8.1%
TOTAL	62	100.0%

Table 16.9 Person to Playing Surface Contact Ice Hockey Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Ice	6	75.0%
Ice rink	2	25.0%
TOTAL	8	75.0%

Table 16.10 Person to Playing Surface Contact Ice Hockey Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Ice	52	83.9%
Ice rink	8	12.9%
Boards	1	1.6%
Concrete	1	1.6%
TOTAL	62	100.0%

Table 16.11 Ice Hockey Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	37	59.7%
Coach	6	9.7%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	1	1.6%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	11	17.7%
Multiple examiners	7	11.3%
TOTAL	62	100.0%

Table 16.12 Ice Hockey Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	52	83.9%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	10	16.1%
TOTAL	62	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 16.13 Ice Hockey Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	15	24.2%
No reported previous concussions	47	75.8%
TOTAL	62	100.0%

Table 16.14 Most Recent Concussion for Ice Hockey Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	1	6.7%
Within six months to one year	5	33.3%
Over one year	9	60.0%
TOTAL	15	100.0%

Table 16.15 Number of Previous Concussions for Ice Hockey Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	11	73.3%
2 concussions	1	6.7%
3 concussions	0	0.0%
≥4 concussions	3	20.0%
Not specified	0	0.0%
TOTAL	15	100.0%

Table 16.16 Ice Hockey Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	58	93.5%
Did not receive written authorization to return by the end of season	4	6.5%
Follow-up Report not completed	0	0.0%
TOTAL	62	100.0%

Table 16.17 Ice Hockey Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	37	59.7%
DO	11	17.7%
PA	5	8.1%
NP	5	8.1%
Medical examiner data not available*	4	6.5%
TOTAL	62	100.0%

Table 16.18 Ice Hockey Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	3	4.8%
Urgent or Ready Care business	6	9.7%
Primary care physician or pediatrician's office	32	51.6%
Neurologist's office	7	11.3%
Team doctor	10	16.1%
Medical facility data not available*	4	6.5%
TOTAL	62	100.0%

Table 16.19 Ice Hockey Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	56	90.3%
Conditions to return	2	3.2%
Return to activity data not available*	4	6.5%
TOTAL	62	100.0%

Table 16.20 Ice Hockey Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	33	53.2%
1-2 Days	15	24.2%
3-6 Days	6	9.7%
7-9 Days	2	3.2%
10-20 Days	2	3.2%
≥21 Days	0	0.0%
Missed school data not available*	4	6.5%
TOTAL	62	100.0%

Table 16.21 Ice Hockey Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	4	6.5%
6-10 Days	18	29.0%
11-15 Days	17	27.4%
16-20 Days	6	9.7%
≥21 Days	13	21.0%
Data not available**	4	6.5%
TOTAL	62	100.0%

0 Missing Follow-up Reports*

4 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

XVII. Boys Lacrosse Head Injury Reports

Table 17.1 Head Injury Prevalence Rate for Boys Lacrosse, MHSAA Head Injury Reporting System, 2024-25 School Year

Boys Lacrosse Participation	5,038
All Boys Lacrosse Head Injuries	91
Boys Lacrosse Head Injury Prevalence Rate (reported head injuries/total participants)	1.81%
Boys Lacrosse Head Injury Prevalence Rate Per Thousand Participants	18

Table 17.2 Boys Lacrosse Head Injuries by Gender, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Male	91	100.0%
Female	0	0.0%
TOTAL	91	100.0%

Table 17.3 Boys Lacrosse Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	70	76.9%
Junior Varsity	21	23.1%
Freshman	0	0.0%
TOTAL	91	100.0%

Table 17.4 Boys Lacrosse Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	8	8.8%
Competition	83	91.2%
TOTAL	91	100.0%

Table 17.5 Boys Lacrosse Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	1	12.5%
Middle of practice	3	37.5%
End of practice	4	50.0%
PRACTICE TOTAL	8	100.0%
Start of competition	7	8.4%
Middle of competition	52	62.7%
End of competition	24	28.9%
COMPETITION TOTAL	83	100.0%

Table 17.6 Activity Type for Boys Lacrosse Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	5	62.5%
During simulated competition-scrimmage	3	37.5%
Not specified	0	0.0%
TOTAL	8	100.0%

Table 17.7 Injury Occurred While Playing Offense, Defense, or Special Teams for Boys Lacrosse Head Injuries, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Offense	32	35.2%
Defense	19	20.9%
Special Teams	0	0.0%
Unknown	30	33.0%
Not Applicable	10	11.0%
TOTAL	91	100.0%

Table 17.8 Boys Lacrosse Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	55	60.4%
Person to object contact (e.g. wall, equipment)	17	18.7%
Person to playing surface contact	13	14.3%
Uncertain as to the cause of the event	6	6.6%
TOTAL	91	100.0%

Table 17.9 Person to Playing Surface Contact Boys Lacrosse Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Artificial turf	12	92.3%
Natural grass	1	7.7%
TOTAL	13	7.7%

Table 17.10 Boys Lacrosse Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Natural grass	7	7.7%
Artificial turf	83	91.2%
Other	1	1.1%
TOTAL	91	100.0%

Table 17.11 Boys Lacrosse Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	60	65.9%
Coach	6	6.6%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	17	18.7%
Multiple examiners	8	8.8%
TOTAL	91	100.0%

Table 17.12 Boys Lacrosse Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	70	76.9%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	1	1.1%
NOT removed from activity at the time of the injury event*	20	22.0%
TOTAL	91	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 17.13 Boys Lacrosse Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	19	20.9%
No reported previous concussions	72	79.1%
TOTAL	91	100.0%

Table 17.14 Most Recent Concussion for Boys Lacrosse Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	1	5.3%
Within one to six months	0	0.0%
Within six months to one year	2	10.5%
Over one year	16	84.2%
TOTAL	19	100.0%

Table 17.15 Number of Previous Concussions for Boys Lacrosse Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	12	63.2%
2 concussions	3	15.8%
3 concussions	3	15.8%
≥4 concussions	0	0.0%
Not specified	1	5.3%
TOTAL	19	100.0%

Table 17.16 Boys Lacrosse Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	71	78.0%
Did not receive written authorization to return by the end of season	11	12.1%
Follow-up Report not completed	9	9.9%
TOTAL	91	100.0%

Table 17.17 Boys Lacrosse Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	32	35.2%
DO	16	17.6%
PA	13	14.3%
NP	10	11.0%
Medical examiner data not available*	20	22.0%
TOTAL	91	100.0%

Table 17.18 Boys Lacrosse Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	0	0.0%
Urgent or Ready Care business	2	2.2%
Primary care physician or pediatrician's office	62	68.1%
Neurologist's office	1	1.1%
Team doctor	6	6.6%
Medical facility data not available*	20	22.0%
TOTAL	91	100.0%

Table 17.19 Boys Lacrosse Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	70	76.9%
Conditions to return	1	1.1%
Return to activity data not available*	20	22.0%
TOTAL	91	100.0%

Table 17.20 Boys Lacrosse Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	40	44.0%
1-2 Days	26	28.6%
3-6 Days	5	5.5%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	20	22.0%
TOTAL	91	100.0%

Table 17.21 Boys Lacrosse Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	13	14.3%
6-10 Days	23	25.3%
11-15 Days	17	18.7%
16-20 Days	12	13.2%
≥21 Days	6	6.6%
Data not available**	20	22.0%
TOTAL	91	100.0%

9 Missing Follow-up Reports*

11 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

XVIII. Girls Lacrosse Head Injury Reports

Table 18.1 Head Injury Prevalence Rate for Girls Lacrosse, MHSAA Head Injury Reporting System, 2024-25 School Year

Girls Lacrosse Participation	3,194
All Girls Lacrosse Head Injuries	47
Girls Lacrosse Head Injury Prevalence Rate (reported head injuries/total participants)	1.47%
Girls Lacrosse Head Injury Prevalence Rate Per Thousand Participants	15

Table 18.2 Girls Lacrosse Head Injuries by Gender, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	33	70.2%
Junior Varsity	14	29.8%
Freshman	0	0.0%
TOTAL	47	100.0%

Table 18.3 Girls Lacrosse Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	70	76.9%
Junior Varsity	21	23.1%
Freshman	0	0.0%
TOTAL	91	100.0%

Table 18.4 Girls Lacrosse Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	10	21.3%
Competition	37	78.7%
TOTAL	47	100.0%

Table 18.5 Girls Lacrosse Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	2	20.0%
Middle of practice	6	60.0%
End of practice	2	20.0%
PRACTICE TOTAL	10	100.0%
Start of competition	3	8.1%
Middle of competition	21	56.8%
End of competition	13	35.1%
COMPETITION TOTAL	37	100.0%

Table 18.6 Activity Type for Girls Lacrosse Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	8	80.0%
During simulated competition-scrimmage	1	10.0%
Not specified	1	10.0%
TOTAL	10	100.0%

Table 18.7 Injury Occurred While Playing Offense, Defense, or Special Teams for Girls Lacrosse Head Injuries, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Offense	4	8.5%
Defense	21	44.7%
Special Teams	1	2.1%
Unknown	16	34.0%
Not Applicable	5	10.6%
TOTAL	47	100.0%

Table 18.8 Girls Lacrosse Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	9	19.1%
Person to object contact (e.g. wall, equipment)	32	68.1%
Person to playing surface contact	3	6.4%
Uncertain as to the cause of the event	3	6.4%
TOTAL	47	100.0%

Table 18.9 Person to Playing Surface Contact Girls Lacrosse Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Artificial turf	2	66.7%
Natural grass	1	33.3%
Wooden gym floor	0	0.0%
Other	0	0.0%
TOTAL	3	33.3%

Table 18.10 Girls Lacrosse Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Artificial turf	41	87.2%
Natural grass	5	10.6%
Wooden gym floor	1	2.1%
Other	0	0.0%
TOTAL	47	100.0%

Table 18.11 Girls Lacrosse Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	29	61.7%
Coach	1	2.1%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	12	25.5%
Multiple examiners	5	10.6%
TOTAL	47	100.0%

Table 18.12 Girls Lacrosse Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	34	72.3%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	13	27.7%
TOTAL	47	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 18.13 Girls Lacrosse Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	10	21.3%
No reported previous concussions	37	78.7%
TOTAL	47	100.0%

Table 18.14 Most Recent Concussion for Girls Lacrosse Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	3	30.0%
Within six months to one year	3	30.0%
Over one year	4	40.0%
TOTAL	10	100.0%

Table 18.15 Number of Previous Concussions for Girls Lacrosse Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	8	80.0%
2 concussions	1	10.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	1	10.0%
TOTAL	10	100.0%

Table 18.16 Girls Lacrosse Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	40	85.1%
Did not receive written authorization to return by the end of season	6	12.8%
Follow-up Report not completed	1	2.1%
TOTAL	47	100.0%

Table 18.17 Girls Lacrosse Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	17	36.2%
DO	14	29.8%
PA	2	4.3%
NP	7	14.9%
Medical examiner data not available*	7	14.9%
TOTAL	47	100.0%

Table 18.18 Girls Lacrosse Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	1	2.1%
Urgent or Ready Care business	1	2.1%
Primary care physician or pediatrician's office	25	53.2%
Neurologist's office	2	4.3%
Team doctor	11	23.4%
Medical facility data not available*	7	14.9%
TOTAL	47	100.0%

Table 18.19 Girls Lacrosse Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	37	78.7%
Conditions to return	3	6.4%
Return to activity data not available*	7	14.9%
TOTAL	47	100.0%

Table 18.20 Girls Lacrosse Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	26	55.3%
1-2 Days	13	27.7%
3-6 Days	1	2.1%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	7	14.9%
TOTAL	47	100.0%

Table 18.21 Girls Lacrosse Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	1	2.1%
3-5 Days	3	6.4%
6-10 Days	15	31.9%
11-15 Days	7	14.9%
16-20 Days	6	12.8%
≥21 Days	6	12.8%
Data not available**	9	19.1%
TOTAL	47	100.0%

1 Missing Follow-up Reports*

6 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

2 Data entry errors**

XIX. Boys Skiing Head Injury Reports

Table 19.1 Head Injury Prevalence Rate for Boys Skiing, MHSAA Head Injury Reporting System, 2024-25 School Year

Boys Skiing Participation	762
All Reported Boys Skiing Head Injuries	4
Boys Skiing Head Injury Prevalence Rate (reported head injuries/total participants)	0.52%
Boys Skiing Head Injury Prevalence Rate Per Thousand Participants	5

Table 19.2 Boys Skiing Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	4	100.0%
Junior Varsity	0	0.0%
Freshman	0	0.0%
TOTAL	4	100.0%

Table 19.3 Boys Skiing Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	2	50.0%
Competition	2	50.0%
TOTAL	4	100.0%

Table 19.4 Boys Skiing Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	2	100.0%
End of practice	0	0.0%
PRACTICE TOTAL	2	100.0%
Start of competition	1	50.0%
Middle of competition	1	50.0%
End of competition	0	0.0%
COMPETITION TOTAL	2	100.0%

Table 19.5 Activity Type for Boys Skiing Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	1	50.0%
During simulated competition-scrimmage	1	50.0%
Not specified	0	0.0%
TOTAL	2	100.0%

Table 19.6 Boys Skiing Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	0	0.0%
Person to object contact (e.g. wall, equipment)	0	0.0%
Person to playing surface contact	4	100.0%
Uncertain as to the cause of the event	0	0.0%
TOTAL	4	100.0%

Table 19.7 Person to Playing Surface Contact Boys Skiing Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Snow/ice covered ground	4	100.0%
TOTAL	4	100.0%

Table 19.8 Boys Skiing Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Snow/ice covered ground	4	100.0%
TOTAL	4	100.0%

Table 19.9 Boys Skiing Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	0	0.0%
Coach	2	50.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	1	25.0%
Multiple examiners	1	25.0%
TOTAL	4	100.0%

Table 19.10 Boys Skiing Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	3	75.0%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	1	25.0%
TOTAL	4	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 19.11 Boys Skiing Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	0	0.0%
No reported previous concussions	4	100.0%
TOTAL	4	100.0%

Table 19.12 Most Recent Concussion for Boys Skiing Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	0	0.0%
TOTAL	0	0.0%

Table 19.13 Number of Previous Concussions for Boys Skiing Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	0	0.0%
2 concussions	0	0.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	0	0.0%

Table 19.14 Boys Skiing Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	4	100.0%
Did not receive written authorization to return by the end of season	0	0.0%
Follow-up Report not completed	0	0.0%
TOTAL	4	100.0%

Table 19.15 Boys Skiing Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	2	50.0%
DO	1	25.0%
PA	0	0.0%
NP	1	25.0%
Medical examiner data not available*	0	0.0%
TOTAL	4	100.0%

Table 19.16 Boys Skiing Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	0	0.0%
Urgent or Ready Care business	1	25.0%
Primary care physician or pediatrician's office	3	75.0%
Neurologist's office	0	0.0%
Team doctor	0	0.0%
Medical facility data not available*	0	0.0%
TOTAL	4	100.0%

Table 19.17 Boys Skiing Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	4	100.0%
Conditions to return	0	0.0%
Return to activity data not available*	0	0.0%
TOTAL	4	100.0%

Table 19.18 Boys Skiing Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	3	75.0%
1-2 Days	0	0.0%
3-6 Days	1	25.0%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	0	0.0%
TOTAL	4	100.0%

Table 19.19 Boys Skiing Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	1	25.0%
3-5 Days	1	25.0%
6-10 Days	1	25.0%
11-15 Days	0	0.0%
16-20 Days	1	25.0%
≥21 Days	0	0.0%
Data not available**	0	0.0%
TOTAL	4	100.0%

0 Missing Follow-up Reports*

0 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

XX. Girls Skiing Head Injury Reports

Table 20.1 Head Injury Prevalence Rate for Girls Skiing, MHSAA Head Injury Reporting System, 2024-25 School Year

Girls Skiing Participation	727
All Reported Girls Skiing Head Injuries	4
Girls Skiing Head Injury Prevalence Rate (reported head injuries/total participants)	0.55%
Girls Skiing Head Injury Prevalence Rate Per Thousand Participants	6

Table 20.2 Girls Skiing Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	4	100.0%
Junior Varsity	0	0.0%
Freshman	0	0.0%
TOTAL	4	100.0%

Table 20.3 Girls Skiing Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	3	75.0%
Competition	1	25.0%
TOTAL	4	100.0%

Table 20.4 Girls Skiing Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	0	0.0%
End of practice	3	100.0%
PRACTICE TOTAL	3	100.0%
Start of competition	0	0.0%
Middle of competition	1	100.0%
End of competition	0	0.0%
COMPETITION TOTAL	1	100.0%

Table 20.5 Activity Type for Girls Skiing Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	1	33.3%
During simulated competition-scrimmage	2	66.7%
Not specified	0	0.0%
TOTAL	3	100.0%

Table 20.6 Girls Skiing Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	0	0.0%
Person to object contact (e.g. wall, equipment)	1	25.0%
Person to playing surface contact	3	75.0%
Uncertain as to the cause of the event	0	0.0%
TOTAL	4	100.0%

Table 20.7 Person to Playing Surface Contact Girls Skiing Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Snow/ice covered ground	3	100.0%
TOTAL	3	100.0%

Table 20.8 Girls Skiing Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Snow/ice covered ground	4	100.0%
TOTAL	4	100.0%

Table 20.9 Girls Skiing Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	0	0.0%
Coach	3	75.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	1	25.0%
Not initially examined at the time of the suspected head injury	0	0.0%
Multiple examiners	0	0.0%
TOTAL	4	100.0%

Table 20.10 Girls Skiing Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	4	100.0%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	0	0.0%
TOTAL	4	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 20.11 Girls Skiing Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	0	0.0%
No reported previous concussions	4	100.0%
TOTAL	4	100.0%

Table 20.12 Most Recent Concussion for Girls Skiing Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	0	0.0%
TOTAL	0	0.0%

Table 20.13 Number of Previous Concussions for Girls Skiing Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	0	0.0%
2 concussions	0	0.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	0	0.0%

Table 20.14 Girls Skiing Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	2	50.0%
Did not receive written authorization to return by the end of season	2	50.0%
Follow-up Report not completed	0	0.0%
TOTAL	4	100.0%

Table 20.15 Girls Skiing Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	1	25.0%
DO	0	0.0%
PA	0	0.0%
NP	1	25.0%
Medical examiner data not available*	2	50.0%
TOTAL	4	100.0%

Table 20.16 Girls Skiing Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	0	0.0%
Urgent or Ready Care business	0	0.0%
Primary care physician or pediatrician's office	2	50.0%
Neurologist's office	0	0.0%
Team doctor	0	0.0%
Medical facility data not available*	2	50.0%
TOTAL	4	100.0%

Table 20.17 Girls Skiing Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	2	50.0%
Conditions to return	0	0.0%
Return to activity data not available*	2	50.0%
TOTAL	4	100.0%

Table 20.18 Girls Skiing Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	1	25.0%
1-2 Days	1	25.0%
3-6 Days	0	0.0%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	2	50.0%
TOTAL	4	100.0%

Table 20.19 Girls Skiing Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	1	25.0%
6-10 Days	0	0.0%
11-15 Days	1	25.0%
16-20 Days	0	0.0%
≥21 Days	0	0.0%
Data not available**	2	50.0%
TOTAL	4	100.0%

0 Missing Follow-up Reports*

2 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

XXI. Boys Soccer Head Injury Reports

Table 21.1 Head Injury Prevalence Rate for Boys Soccer, MHSAA Head Injury Reporting System, 2024-25 School Year

Boys Soccer Participation	14,112
All Reported Boys Soccer Head Injuries	160
Boys Soccer Head Injury Prevalence Rate (reported head injuries/total participants)	1.13%
Boys Soccer Head Injury Prevalence Rate Per Thousand Participants	11

Table 21.2 Boys Soccer Head Injuries by Gender, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Male	158	98.8%
Female	2	1.3%
TOTAL	160	100.0%

Table 21.3 Boys Soccer Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	119	74.4%
Junior Varsity	41	25.6%
Freshman	0	0.0%
TOTAL	160	100.0%

Table 21.4 Boys Soccer Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	21	13.1%
Competition	139	86.9%
TOTAL	160	100.0%

Table 21.5 Boys Soccer Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	11	52.4%
End of practice	10	47.6%
PRACTICE TOTAL	21	100.0%
Start of competition	16	11.5%
Middle of competition	66	47.5%
End of competition	57	41.0%
COMPETITION TOTAL	139	100.0%

Table 21.6 Activity Type for Boys Soccer Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	13	61.9%
During simulated competition-scrimmage	8	38.1%
Not specified	0	0.0%
TOTAL	21	100.0%

Table 21.7 Injury Occurred While Playing Offense, Defense, or Special Teams for Boys Soccer Head Injuries, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Offense	17	10.6%
Defense	37	23.1%
Special Teams	1	0.6%
Unknown	47	29.4%
Not Applicable	58	36.3%
TOTAL	160	100.0%

Table 21.8 Boys Soccer Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	63	39.4%
Person to object contact (e.g. wall, equipment)	54	33.8%
Person to playing surface contact	25	15.6%
Uncertain as to the cause of the event	18	11.3%
TOTAL	160	100.0%

Table 21.9 Person to Playing Surface Contact Boys Soccer Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Natural grass	12	48.0%
Artificial turf	12	48.0%
Soccer field	1	4.0%
TOTAL	25	100.0%

Table 21.10 Boys Soccer Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Natural grass	82	51.3%
Artificial turf	68	42.5%
Soccer field	6	3.8%
Other	4	2.5%
TOTAL	160	100.0%

Table 21.11 Boys Soccer Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	65	40.6%
Coach	20	12.5%
Sideline emergency personnel	1	0.6%
Other appropriate health care professional	1	0.6%
DO	0	0.0%
MD	1	0.6%
PA	0	0.0%
NP	1	0.6%
Athletic director	1	0.6%
Not initially examined at the time of the suspected head injury	36	22.5%
Multiple examiners	34	21.3%
TOTAL	160	100.0%

Table 21.12 Boys Soccer Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	111	69.4%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	7	4.4%
NOT removed from activity at the time of the injury event*	42	26.3%
TOTAL	160	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 21.13 Boys Soccer Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	18	11.3%
No reported previous concussions	142	88.8%
TOTAL	160	100.0%

Table 21.14 Most Recent Concussion for Boys Soccer Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	1	5.6%
Within six months to one year	9	50.0%
Over one year	8	44.4%
TOTAL	18	100.0%

Table 21.15 Number of Previous Concussions for Boys Soccer Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	14	77.8%
2 concussions	3	16.7%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	1	5.6%
TOTAL	18	100.0%

Table 21.16 Boys Soccer Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	141	88.1%
Did not receive written authorization to return by the end of season	17	10.6%
Follow-up Report not completed	2	1.3%
TOTAL	160	100.0%

Table 21.17 Boys Soccer Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	65	40.6%
DO	32	20.0%
PA	19	11.9%
NP	25	15.6%
Medical examiner data not available*	19	11.9%
TOTAL	160	100.0%

Table 21.18 Boys Soccer Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	8	5.0%
Urgent or Ready Care business	15	9.4%
Primary care physician or pediatrician's office	97	60.6%
Neurologist's office	3	1.9%
Team doctor	18	11.3%
Medical facility data not available*	19	11.9%
TOTAL	160	100.0%

Table 21.19 Boys Soccer Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	133	83.1%
Conditions to return	8	5.0%
Return to activity data not available*	19	11.9%
TOTAL	160	100.0%

Table 21.20 Boys Soccer Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	86	53.8%
1-2 Days	44	27.5%
3-6 Days	7	4.4%
7-9 Days	1	0.6%
10-20 Days	3	1.9%
≥21 Days	0	0.0%
Missed school data not available*	19	11.9%
TOTAL	160	100.0%

Table 21.21 Boys Soccer Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	3	1.9%
3-5 Days	20	12.5%
6-10 Days	56	35.0%
11-15 Days	34	21.3%
16-20 Days	12	7.5%
≥21 Days	16	10.0%
Data not available**	19	11.9%
TOTAL	160	100.0%

2 Missing Follow-up Reports*

17 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

XXII. Girls Soccer Head Injury Reports

Table 22.1 Head Injury Prevalence Rate for Girls Soccer, MHSAA Head Injury Reporting System, 2024-25 School Year

Girls Soccer Participation	11,909
All Girls Soccer Head Injuries	242
Girls Soccer Head Injury Prevalence Rate (reported head injuries/total participants)	2.03%
Girls Soccer Head Injury Prevalence Rate Per Thousand Participants	20

Table 22.2 Girls Soccer Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	179	74.0%
Junior Varsity	60	24.8%
Freshman	3	1.2%
TOTAL	242	100.0%

Table 22.3 Girls Soccer Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	34	14.0%
Competition	208	86.0%
TOTAL	242	100.0%

Table 22.4 Girls Soccer Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	21	61.8%
End of practice	13	38.2%
PRACTICE TOTAL	34	100.0%
Start of competition	25	12.0%
Middle of competition	120	57.7%
End of competition	63	30.3%
COMPETITION TOTAL	208	100.0%

Table 22.5 Activity Type for Girls Soccer Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	25	73.5%
During simulated competition-scrimmage	7	20.6%
Not specified	2	5.9%
TOTAL	34	100.0%

Table 22.6 Injury Occurred While Playing Offense, Defense, or Special Teams for Boys Basketball Head Injuries, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Offense	23	9.5%
Defense	71	29.3%
Special Teams	0	0.0%
Unknown	78	32.2%
Not Applicable	70	28.9%
TOTAL	242	100.0%

Table 22.7 Girls Soccer Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	76	31.4%
Person to object contact (e.g. wall, equipment)	113	46.7%
Person to playing surface contact	36	14.9%
Uncertain as to the cause of the event	17	7.0%
TOTAL	242	100.0%

Table 22.8 Person to Playing Surface Contact Girls Soccer Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Natural grass	19	52.8%
Artificial turf	15	41.7%
Soccer field	2	5.6%
Unknown	0	0.0%
TOTAL	36	100.0%

Table 22.9 Person to Playing Surface Contact Girls Soccer Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Natural grass	127	52.5%
Artificial turf	90	37.2%
Soccer field	12	5.0%
Wooden gym floor	3	1.2%
Not specified	10	4.1%
TOTAL	242	100.0%

Table 22.10 Girls Soccer Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	128	52.9%
Coach	30	12.4%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	2	0.8%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	54	22.3%
Multiple examiners	28	11.6%
TOTAL	242	100.0%

Table 22.11 Girls Soccer Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	174
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	4
NOT removed from activity at the time of the injury event*	64
TOTAL	242

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 22.12 Girls Soccer Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	43	17.8%
No reported previous concussions	199	82.2%
TOTAL	242	100.0%

Table 22.13 Most Recent Concussion for Girls Soccer Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	1	2.3%
Within one to six months	2	4.7%
Within six months to one year	11	25.6%
Over one year	29	67.4%
TOTAL	43	100.0%

Table 22.14 Number of Previous Concussions for Girls Soccer Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	31	72.1%
2 concussions	4	9.3%
3 concussions	0	0.0%
≥4 concussions	1	2.3%
Not specified	7	16.3%
TOTAL	43	100.0%

Table 22.15 Girls Soccer Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	179	74.0%
Did not receive written authorization to return by the end of season	38	15.7%
Follow-up Report not completed	25	10.3%
TOTAL	242	100.0%

Table 22.16 Girls Soccer Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	101	41.7%
DO	24	9.9%
PA	24	9.9%
NP	30	12.4%
Medical examiner data not available*	63	26.0%
TOTAL	242	100.0%

Table 22.17 Girls Soccer Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	4	1.7%
Urgent or Ready Care business	10	4.1%
Primary care physician or pediatrician's office	129	53.3%
Neurologist's office	3	1.2%
Team doctor	33	13.6%
Medical facility data not available*	63	26.0%
TOTAL	242	100.0%

Table 22.18 Girls Soccer Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	167	69.0%
Conditions to return	12	5.0%
Return to activity data not available*	63	26.0%
TOTAL	242	100.0%

Table 22.19 Girls Soccer Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	118	48.8%
1-2 Days	50	20.7%
3-6 Days	10	4.1%
7-9 Days	1	0.4%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	63	26.0%
TOTAL	242	100.0%

Table 22.20 Girls Soccer Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	5	2.1%
3-5 Days	11	4.5%
6-10 Days	61	25.2%
11-15 Days	56	23.1%
16-20 Days	17	7.0%
≥21 Days	25	10.3%
Data not available**	67	27.7%
TOTAL	242	100.0%

25 Missing Follow-up Reports*

38 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

4 Data entry errors**

XXIII. Softball Head Injury Reports

Table 23.1 Head Injury Prevalence Rate for Softball, MHSAA Head Injury Reporting System, 2024-25 School Year

Softball Participation	11,368
All Softball Head Injuries	80
Softball Head Injury Prevalence Rate (reported head injuries/total participants)	0.70%
Softball Head Injury Prevalence Rate Per Thousand Participants	7

Table 23.2 Softball Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	46	57.5%
Junior Varsity	34	42.5%
Freshman	0	0.0%
TOTAL	80	100.0%

Table 23.3 Softball Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	31	38.8%
Competition	49	61.3%
TOTAL	80	100.0%

Table 23.4 Softball Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	10	32.3%
Middle of practice	12	38.7%
End of practice	9	29.0%
PRACTICE TOTAL	31	100.0%
Start of competition	10	20.4%
Middle of competition	28	57.1%
End of competition	11	22.4%
COMPETITION TOTAL	49	100.0%

Table 23.5 Activity Type for Softball Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	27	87.1%
During simulated competition-scrimmage	2	6.5%
Not specified	2	6.5%
TOTAL	31	100.0%

Table 23.6 Injury Occurred While Playing Offense, Defense, or Special Teams for Softball Head Injuries, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Offense	10	12.5%
Defense	28	35.0%
Special Teams	0	0.0%
Unknown	17	21.3%
Not Applicable	25	31.3%
TOTAL	80	100.0%

Table 23.7 Softball Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	17	21.3%
Person to object contact (e.g. wall, equipment)	58	72.5%
Person to playing surface contact	4	5.0%
Uncertain as to the cause of the event	1	1.3%
TOTAL	80	100.0%

Table 23.8 Person to Playing Surface Contact Softball Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Natural grass	1	25.0%
Dirt	1	25.0%
Pavement	1	25.0%
Softball field	1	25.0%
TOTAL	4	100.0%

Table 23.9 Person to Playing Surface Contact Softball Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Natural grass	22	27.5%
Dirt	25	31.3%
Softball field	16	20.0%
Wooden gym floor	4	5.0%
Artificial turf	4	5.0%
Pavement	1	1.3%
Other	8	10.0%
TOTAL	80	100.0%

Table 23.10 Softball Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	30	37.5%
Coach	19	23.8%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	2	2.5%
DO	0	0.0%
MD	1	1.3%
PA	0	0.0%
NP	0	0.0%
Athletic director	1	1.3%
Not initially examined at the time of the suspected head injury	11	13.8%
Multiple examiners	16	20.0%
TOTAL	80	100.0%

Table 23.11 Softball Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	65	81.3%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	1	1.3%
NOT removed from activity at the time of the injury event*	14	17.5%
TOTAL	80	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 23.12 Softball Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	11	13.8%
No reported previous concussions	69	86.3%
TOTAL	80	100.0%

Table 23.13 Most Recent Concussion for Softball Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	1	9.1%
Within six months to one year	5	45.5%
Over one year	5	45.5%
TOTAL	11	100.0%

Table 23.14 Number of Previous Concussions for Softball Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	9	81.8%
2 concussions	1	9.1%
3 concussions	1	9.1%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	11	100.0%

Table 23.15 Softball Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	57	71.3%
Did not receive written authorization to return by the end of season	10	12.5%
Follow-up Report not completed	13	16.3%
TOTAL	80	100.0%

Table 23.16 Softball Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	26	32.5%
DO	8	10.0%
PA	10	12.5%
NP	13	16.3%
Medical examiner data not available*	23	28.8%
TOTAL	80	100.0%

Table 23.17 Softball Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	1	1.3%
Urgent or Ready Care business	9	11.3%
Primary care physician or pediatrician's office	40	50.0%
Neurologist's office	4	5.0%
Team doctor	3	3.8%
Medical facility data not available*	23	28.8%
TOTAL	80	100.0%

Table 23.18 Softball Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	50	62.5%
Conditions to return	7	8.8%
Return to activity data not available*	23	28.8%
TOTAL	80	100.0%

Table 23.19 Softball Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	34	42.5%
1-2 Days	18	22.5%
3-6 Days	4	5.0%
7-9 Days	0	0.0%
10-20 Days	1	1.3%
≥21 Days	0	0.0%
Missed school data not available*	23	28.8%
TOTAL	80	100.0%

Table 23.20 Softball Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	1	1.3%
3-5 Days	6	7.5%
6-10 Days	25	31.3%
11-15 Days	10	12.5%
16-20 Days	7	8.8%
≥21 Days	8	10.0%
Data not available**	23	28.8%
TOTAL	80	100.0%

13 Missing Follow-up Reports*

10 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

**XXIV. Boys Swimming & Diving
Head Injury Reports**

Table 24.1 Head Injury Prevalence Rate for Boys Swimming & Diving, MHSAA Head Injury Reporting System, 2024-25 School Year

Boys Swimming & Diving Participation	4,073
All Reported Boys Swimming & Diving Head Injuries	9
Boys Swimming & Diving Head Injury Prevalence Rate (reported head injuries/total participants)	0.22%
Boys Swimming & Diving Head Injury Prevalence Rate Per Thousand Participants	2

Table 24.2 Boys Swimming & Diving Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	9	100.0%
Junior Varsity	0	0.0%
Freshman	0	0.0%
TOTAL	9	100.0%

Table 24.3 Boys Swimming & Diving Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	7	77.8%
Competition	2	22.2%
TOTAL	9	100.0%

Table 24.4 Boys Swimming & Diving Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	4	57.1%
End of practice	3	42.9%
PRACTICE TOTAL	7	100.0%
Start of competition	2	22.2%
Middle of competition	0	0.0%
End of competition	0	0.0%
COMPETITION TOTAL	2	22.2%

Table 24.5 Activity Type for Boys Swimming & Diving Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	7	100.0%
During simulated competition-scrimmage	0	0.0%
Not specified	0	0.0%
TOTAL	7	100.0%

Table 24.6 Boys Swimming & Diving Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	1	11.1%
Person to object contact (e.g. wall, equipment)	3	33.3%
Person to playing surface contact	4	44.4%
Uncertain as to the cause of the event	1	11.1%
TOTAL	9	100.0%

Table 24.7 Person to Playing Surface Contact Boys Swimming & Diving Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Water	4	100.0%
Pool tile	0	0.0%
Diving board	0	0.0%
TOTAL	4	100.0%

Table 24.8 Boys Swimming & Diving Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Water	6	66.7%
Pool	1	11.1%
Pool tile	1	11.1%
Pool wall	1	11.1%
TOTAL	9	100.0%

Table 24.9 Boys Swimming & Diving Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	4	44.4%
Coach	2	22.2%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	1	11.1%
Multiple examiners	2	22.2%
TOTAL	9	100.0%

Table 24.10 Boys Swimming & Diving Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	6	66.7%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	3	33.3%
TOTAL	9	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 24.11 Boys Swimming & Diving Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	1	11.1%
No reported previous concussions	8	88.9%
TOTAL	9	100.0%

Table 24.12 Most Recent Concussion for Boys Swimming & Diving Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	1	100.0%
TOTAL	1	100.0%

Table 24.13 Number of Previous Concussions for Boys Swimming & Diving Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	1	100.0%
2 concussions	0	0.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	1	100.0%

Table 24.14 Boys Swimming & Diving Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	9	100.0%
Did not receive written authorization to return by the end of season	0	0.0%
Follow-up Report not completed	0	0.0%
TOTAL	9	100.0%

Table 24.15 Boys Swimming & Diving Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	4	44.4%
DO	2	22.2%
PA	1	11.1%
NP	2	22.2%
Medical examiner data not available*	0	0.0%
TOTAL	9	100.0%

Table 24.16 Boys Swimming & Diving Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	0	0.0%
Urgent or Ready Care business	0	0.0%
Primary care physician or pediatrician's office	7	77.8%
Neurologist's office	0	0.0%
Team doctor	2	22.2%
Medical facility data not available*	0	0.0%
TOTAL	9	100.0%

Table 24.17 Boys Swimming & Diving Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	9	100.0%
Conditions to return	0	0.0%
Return to activity data not available*	0	0.0%
TOTAL	9	100.0%

Table 24.18 Boys Swimming & Diving Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	6	66.7%
1-2 Days	3	33.3%
3-6 Days	0	0.0%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	0	0.0%
TOTAL	9	100.0%

Table 24.19 Boys Swimming & Diving Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	1	11.1%
6-10 Days	3	33.3%
11-15 Days	0	0.0%
16-20 Days	3	33.3%
≥21 Days	2	22.2%
Data not available**	0	0.0%
TOTAL	9	100.0%

0 Missing Follow-up Reports*

0 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

**XXV. Girls Swimming & Diving
Head Injury Reports**

Table 25.1 Head Injury Prevalence Rate for Girls Swimming & Diving, MHSAA Head Injury Reporting System, 2024-25 School Year

Girls Swimming & Diving Participation	4,648
All Reported Girls Swimming & Diving Head Injuries	19
Girls Swimming & Diving Head Injury Prevalence Rate (reported head injuries/total participants)	0.41%
Girls Swimming & Diving Head Injury Prevalence Rate Per Thousand Participants	4

Table 25.2 Girls Swimming & Diving Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	19	100.0%
Junior Varsity	0	0.0%
Freshman	0	0.0%
TOTAL	19	100.0%

Table 25.3 Girls Swimming & Diving Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	16	84.2%
Competition	3	15.8%
TOTAL	19	100.0%

Table 25.4 Girls Swimming & Diving Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	2	12.5%
Middle of practice	7	43.8%
End of practice	7	43.8%
PRACTICE TOTAL	16	100.0%
Start of competition	2	10.5%
Middle of competition	1	5.3%
End of competition	0	0.0%
COMPETITION TOTAL	3	15.8%

Table 25.5 Activity Type for Girls Swimming & Diving Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	13	81.3%
During simulated competition-scrimmage	2	12.5%
Not specified	1	6.3%
TOTAL	16	100.0%

Table 25.6 Girls Swimming & Diving Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	2	10.5%
Person to object contact (e.g. wall, equipment)	11	57.9%
Person to playing surface contact	5	26.3%
Uncertain as to the cause of the event	1	5.3%
TOTAL	19	100.0%

Table 25.7 Person to Playing Surface Contact Girls Swimming & Diving Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Pool	2	40.0%
Pool wall	0	0.0%
Pool deck	0	0.0%
Water	3	60.0%
TOTAL	5	40.0%

Table 25.8 Girls Swimming & Diving Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Pool	6	31.6%
Pool wall	3	15.8%
Diving board	7	36.8%
Water	1	5.3%
Weight room floor	1	5.3%
Unknown	1	5.3%
TOTAL	19	100.0%

Table 25.9 Girls Swimming & Diving Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	7	36.8%
Coach	5	26.3%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	6	31.6%
Multiple examiners	1	5.3%
TOTAL	19	100.0%

Table 25.10 Girls Swimming & Diving Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	6	66.7%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	3	33.3%
TOTAL	9	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 25.11 Girls Swimming & Diving Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	13	68.4%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	6	31.6%
TOTAL	19	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 25.12 Most Recent Concussion for Girls Swimming & Diving Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	2	100.0%
Over one year	0	0.0%
TOTAL	2	100.0%

Table 25.13 Number of Previous Concussions for Girls Swimming & Diving Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	1	50.0%
2 concussions	1	50.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	2	100.0%

Table 25.14 Girls Swimming & Diving Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	17	89.5%
Did not receive written authorization to return by the end of season	1	5.3%
Follow-up Report not completed	1	5.3%
TOTAL	19	100.0%

Table 25.15 Girls Swimming & Diving Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	8	42.1%
DO	6	31.6%
PA	0	0.0%
NP	3	15.8%
Medical examiner data not available*	2	10.5%
TOTAL	19	100.0%

Table 25.16 Girls Swimming & Diving Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	0	0.0%
Urgent or Ready Care business	0	0.0%
Primary care physician or pediatrician's office	13	68.4%
Neurologist's office	0	0.0%
Team doctor	4	21.1%
Medical facility data not available*	2	10.5%
TOTAL	19	100.0%

Table 25.17 Girls Swimming & Diving Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	17	89.5%
Conditions to return	0	0.0%
Return to activity data not available*	2	10.5%
TOTAL	19	100.0%

Table 25.18 Girls Swimming & Diving Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	13	68.4%
1-2 Days	2	10.5%
3-6 Days	0	0.0%
7-9 Days	1	5.3%
10-20 Days	0	0.0%
≥21 Days	1	5.3%
Missed school data not available*	2	10.5%
TOTAL	19	100.0%

Table 25.19 Girls Swimming & Diving Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	1	5.3%
6-10 Days	6	31.6%
11-15 Days	3	15.8%
16-20 Days	3	15.8%
≥21 Days	4	21.1%
Data not available**	2	10.5%
TOTAL	19	100.0%

1 Missing Follow-up Reports*

1 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

XXVI. Boys Tennis Head Injury Reports

Table 26.1 Head Injury Prevalence Rate for Boys Tennis, MHSAA Head Injury Reporting System, 2024-25 School Year

Boys Tennis Participation	6,163
All Reported Boys Tennis Head Injuries	2
Boys Tennis Head Injury Prevalence Rate (reported head injuries/total participants)	0.03%
Boys Tennis Head Injury Prevalence Rate Per Thousand Participants	0

Table 26.2 Boys Tennis Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	1	50.0%
Junior Varsity	1	50.0%
Freshman	0	0.0%
TOTAL	2	100.0%

Table 26.3 Boys Tennis Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	2	100.0%
Competition	0	0.0%
TOTAL	2	100.0%

Table 26.4 Boys Tennis Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	2	100.0%
End of practice	0	0.0%
PRACTICE TOTAL	2	100.0%
Start of competition	0	0.0%
Middle of competition	0	0.0%
End of competition	0	0.0%
COMPETITION TOTAL	0	0.0%

Table 26.5 Activity Type for Boys Tennis Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	2	100.0%
During simulated competition-scrimmage	0	0.0%
Not specified	0	0.0%
TOTAL	2	100.0%

Table 26.6 Boys Tennis Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	0	0.0%
Person to object contact (e.g. wall, equipment)	2	100.0%
Person to playing surface contact	0	0.0%
Uncertain as to the cause of the event	0	0.0%
TOTAL	2	100.0%

Table 26.7 Person to Playing Surface Contact Boys Tennis Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Tennis court	0	0.0%
TOTAL	0	0.0%

Table 26.8 Boys Tennis Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Tennis court	0	0.0%
TOTAL	0	0.0%

Table 26.9 Boys Tennis Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	1	50.0%
Coach	0	0.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	1	50.0%
Multiple examiners	0	0.0%
TOTAL	2	100.0%

Table 26.10 Boys Tennis Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	1	50.0%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	1	50.0%
TOTAL	2	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 26.11 Boys Tennis Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	0	0.0%
No reported previous concussions	2	100.0%
TOTAL	2	100.0%

Table 26.12 Most Recent Concussion for Boys Tennis Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	0	0.0%
TOTAL	0	0.0%

Table 26.13 Number of Previous Concussions for Boys Tennis Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	0	0.0%
2 concussions	0	0.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	0	0.0%

Table 26.14 Boys Tennis Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	0	0.0%
Did not receive written authorization to return by the end of season	2	100.0%
Follow-up Report not completed	0	0.0%
TOTAL	2	100.0%

Table 26.15 Boys Tennis Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	0	0.0%
DO	0	0.0%
PA	0	0.0%
NP	0	0.0%
Medical examiner data not available*	2	100.0%
TOTAL	2	100.0%

Table 26.16 Boys Tennis Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	0	0.0%
Urgent or Ready Care business	0	0.0%
Primary care physician or pediatrician's office	0	0.0%
Neurologist's office	0	0.0%
Team doctor	0	0.0%
Medical facility data not available*	2	100.0%
TOTAL	2	100.0%

Table 26.17 Boys Tennis Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	0	0.0%
Conditions to return	0	0.0%
Return to activity data not available*	2	100.0%
TOTAL	2	100.0%

Table 26.18 Boys Tennis Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	0	0.0%
1-2 Days	0	0.0%
3-6 Days	0	0.0%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	2	100.0%
TOTAL	2	100.0%

Table 26.19 Boys Tennis Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	0	0.0%
6-10 Days	0	0.0%
11-15 Days	0	0.0%
16-20 Days	0	0.0%
≥21 Days	0	0.0%
Data not available**	2	100.0%
TOTAL	2	100.0%

0 Missing Follow-up Reports*

2 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

XXVII. Girls Tennis Head Injury Reports

Table 27.1 Head Injury Prevalence Rate for Girls Tennis, MHSAA Head Injury Reporting System, 2024-25 School Year

Girls Tennis Participation	9,485
All Girls Tennis Head Injuries	6
Girls Tennis Head Injury Prevalence Rate	0.06%
Girls Tennis Head Injury Prevalence Rate Per Thousand Participants	1

Table 27.2 Girls Tennis Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	3	50.0%
Junior Varsity	3	50.0%
Freshman	0	0.0%
TOTAL	6	100.0%

Table 27.3 Girls Tennis Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	4	66.7%
Competition	2	33.3%
TOTAL	6	100.0%

Table 27.4 Girls Tennis Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	3	75.0%
End of practice	1	25.0%
PRACTICE TOTAL	4	100.0%
Start of competition	0	0.0%
Middle of competition	1	50.0%
End of competition	1	50.0%
COMPETITION TOTAL	2	100.0%

Table 27.5 Activity Type for Girls Tennis Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	2	50.0%
During simulated competition-scrimmage	1	25.0%
Not specified	1	25.0%
TOTAL	4	100.0%

Table 27.6 Girls Tennis Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	0	0.0%
Person to object contact (e.g. wall, equipment)	4	66.7%
Person to playing surface contact	1	16.7%
Uncertain as to the cause of the event	1	16.7%
TOTAL	6	100.0%

Table 27.7 Person to Playing Surface Contact Girls Tennis Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Tennis court	1	100.0%
TOTAL	1	100.0%

Table 27.7 Girls Tennis Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Tennis court	6	100.0%
Other	0	0.0%
TOTAL	6	100.0%

Table 27.8 Girls Tennis Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	2	33.3%
Coach	0	0.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	2	33.3%
Multiple examiners	2	33.3%
TOTAL	6	100.0%

Table 27.9 Girls Tennis Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	4	66.7%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	2	33.3%
TOTAL	6	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 27.10 Girls Tennis Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	0	0.0%
No reported previous concussions	6	100.0%
TOTAL	6	100.0%

Table 27.11 Most Recent Concussion for Girls Tennis Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	0	0.0%
TOTAL	0	0.0%

Table 27.12 Number of Previous Concussions for Girls Tennis Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	0	0.0%
2 concussions	0	0.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	0	0.0%

Table 27.13 Girls Tennis Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	3	50.0%
Did not receive written authorization to return by the end of season	2	33.3%
Follow-up Report not completed	1	16.7%
TOTAL	6	100.0%

Table 27.14 Girls Tennis Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	2	33.3%
DO	0	0.0%
PA	0	0.0%
NP	1	16.7%
Medical examiner data not available*	3	50.0%
TOTAL	6	100.0%

Table 27.15 Girls Tennis Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	0	0.0%
Urgent or Ready Care business	0	0.0%
Primary care physician or pediatrician's office	3	50.0%
Neurologist's office	0	0.0%
Team doctor	0	0.0%
Medical facility data not available*	3	50.0%
TOTAL	6	100.0%

Table 27.16 Girls Tennis Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	3	50.0%
Conditions to return	0	0.0%
Return to activity data not available*	3	50.0%
TOTAL	6	100.0%

Table 27.17 Girls Tennis Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	2	33.3%
1-2 Days	0	0.0%
3-6 Days	1	16.7%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	3	50.0%
TOTAL	6	100.0%

Table 27.18 Girls Tennis Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	1	16.7%
3-5 Days	0	0.0%
6-10 Days	2	33.3%
11-15 Days	0	0.0%
16-20 Days	0	0.0%
≥21 Days	0	0.0%
Data not available**	3	50.0%
TOTAL	6	100.0%

1 Missing Follow-up Reports*

2 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

**XXVIII. Boys Track & Field
Head Injury Reports**

Table 28.1 Head Injury Prevalence Rate for Boys Track & Field, MHSAA Head Injury Reporting System, 2024-25 School Year

Boys Track and Field Participation	24,759
All Boys Track and Field Head Injuries	5
Boys Track and Field Head Injury Prevalence Rate (reported head injuries/total participants)	0.02%
Boys Track and Field Head Injury Prevalence Rate Per Thousand Participants	0

Table 28.2 Boys Track & Field Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	4	80.0%
Junior Varsity	1	20.0%
Freshman	0	0.0%
TOTAL	5	100.0%

Table 28.3 Boys Track & Field Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	1	20.0%
Competition	4	80.0%
TOTAL	5	100.0%

Table 28.4 Boys Track & Field Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	0	0.0%
End of practice	1	100.0%
PRACTICE TOTAL	1	100.0%
Start of competition	0	0.0%
Middle of competition	1	25.0%
End of competition	3	75.0%
COMPETITION TOTAL	4	100.0%

Table 28.5 Activity Type for Boys Track & Field Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	1	100.0%
During simulated competition-scrimmage	0	0.0%
Not specified	0	0.0%
TOTAL	1	100.0%

Table 28.6 Boys Track & Field Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	1	20.0%
Person to object contact (e.g. wall, equipment)	1	20.0%
Person to playing surface contact	3	60.0%
Uncertain as to the cause of the event	0	0.0%
TOTAL	5	100.0%

Table 28.7 Person to Playing Surface Contact Boys Track & Field Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Track	2	66.7%
Concrete	1	33.3%
TOTAL	3	100.0%

Table 28.8 Boys Track & Field Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Track	3	60.0%
Concrete	1	20.0%
Pole vault pit	1	20.0%
TOTAL	5	100.0%

Table 28.9 Boys Track & Field Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	2	40.0%
Coach	1	20.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	1	20.0%
Multiple examiners	1	20.0%
TOTAL	5	100.0%

Table 28.10 Boys Track & Field Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	4	80.0%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	1	20.0%
TOTAL	5	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 28.11 Boys Track & Field Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	0	0.0%
No reported previous concussions	5	100.0%
TOTAL	5	100.0%

Table 28.12 Most Recent Concussion for Boys Track & Field Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	0	0.0%
TOTAL	0	0.0%

Table 28.13 Number of Previous Concussions for Boys Track & Field Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	0	0.0%
2 concussions	0	0.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	0	0.0%

Table 28.14 Boys Track & Field Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	4	80.0%
Did not receive written authorization to return by the end of season	1	20.0%
Follow-up Report not completed	0	0.0%
TOTAL	5	100.0%

Table 28.15 Boys Track & Field Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	3	60.0%
DO	0	0.0%
PA	0	0.0%
NP	1	20.0%
Medical examiner data not available*	1	20.0%
TOTAL	5	100.0%

Table 28.16 Boys Track & Field Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	1	20.0%
Urgent or Ready Care business	0	0.0%
Primary care physician or pediatrician's office	3	60.0%
Neurologist's office	0	0.0%
Team doctor	0	0.0%
Medical facility data not available*	1	20.0%
TOTAL	5	100.0%

Table 28.17 Boys Track & Field Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	4	80.0%
Conditions to return	0	0.0%
Return to activity data not available*	1	20.0%
TOTAL	5	100.0%

Table 28.18 Boys Track & Field Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	3	60.0%
1-2 Days	0	0.0%
3-6 Days	1	20.0%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	1	20.0%
TOTAL	5	100.0%

Table 28.19 Boys Track & Field Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	0	0.0%
6-10 Days	1	20.0%
11-15 Days	2	40.0%
16-20 Days	1	20.0%
≥21 Days	0	0.0%
Data not available**	1	20.0%
TOTAL	5	100.0%

0 Missing Follow-up Reports*

1 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

**XXIX. Girls Track & Field
Head Injury Reports**

Table 29.1 Head Injury Prevalence Rate for Girls Track & Field, MHSAA Head Injury Reporting System, 2024-25 School Year

Girls Track and Field Participation	18,108
All Girls Track and Field Head Injuries	11
Girls Track and Field Head Injury Prevalence Rate (reported head injuries/total participants)	0.06%
Girls Track and Field Head Injury Prevalence Rate Per Thousand Participants	1

Table 29.2 Girls Track & Field Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	11	100.0%
Junior Varsity	0	0.0%
Freshman	0	0.0%
TOTAL	11	100.0%

Table 29.3 Girls Track & Field Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	6	54.5%
Competition	5	45.5%
TOTAL	11	100.0%

Table 29.4 Girls Track & Field Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	3	50.0%
Middle of practice	1	16.7%
End of practice	2	33.3%
PRACTICE TOTAL	6	100.0%
Start of competition	2	40.0%
Middle of competition	2	40.0%
End of competition	1	20.0%
COMPETITION TOTAL	5	100.0%

Table 29.5 Activity Type for Girls Track & Field Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	5	83.3%
During simulated competition-scrimmage	1	16.7%
Not specified	0	0.0%
TOTAL	6	100.0%

Table 29.6 Girls Track & Field Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	1	9.1%
Person to object contact (e.g. wall, equipment)	4	36.4%
Person to playing surface contact	6	54.5%
Uncertain as to the cause of the event	0	0.0%
TOTAL	11	100.0%

Table 29.7 Person to Playing Surface Contact Girls Track & Field Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Track	4	66.7%
Concrete	1	16.7%
Pole vault pit	1	16.7%
TOTAL	6	100.0%

Table 29.8 Girls Track & Field Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Track	6	54.5%
Wooden gym floor	2	18.2%
Concrete	1	9.1%
Pole vault pit	1	9.1%
Artificial turf	1	9.1%
Other	0	0.0%
TOTAL	11	100.0%

Table 29.9 Girls Track & Field Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	5	45.5%
Coach	0	0.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	1	9.1%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	3	27.3%
Multiple examiners	2	18.2%
TOTAL	11	100.0%

Table 29.10 Girls Track & Field Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	7	63.6%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	4	36.4%
TOTAL	11	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 29.11 Girls Track & Field Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	1	9.1%
No reported previous concussions	10	90.9%
TOTAL	11	100.0%

Table 29.12 Most Recent Concussion for Girls Track & Field Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	0	0.0%
Within six months to one year	0	0.0%
Over one year	0	0.0%
TOTAL	0	0.0%

Table 29.13 Number of Previous Concussions for Girls Track & Field Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	0	0.0%
2 concussions	0	0.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	0	0.0%

Table 29.14 Girls Track & Field Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	5	45.5%
Did not receive written authorization to return by the end of season	6	54.5%
Follow-up Report not completed	0	0.0%
TOTAL	11	100.0%

Table 29.15 Girls Track & Field Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	2	18.2%
DO	0	0.0%
PA	2	18.2%
NP	1	9.1%
Medical examiner data not available*	6	54.5%
TOTAL	11	100.0%

Table 29.16 Girls Track & Field Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	1	9.1%
Urgent or Ready Care business	1	9.1%
Primary care physician or pediatrician's office	6	54.5%
Neurologist's office	1	9.1%
Team doctor	0	0.0%
Medical facility data not available*	2	18.2%
TOTAL	11	100.0%

Table 29.17 Girls Track & Field Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	4	36.4%
Conditions to return	1	9.1%
Return to activity data not available*	6	54.5%
TOTAL	11	100.0%

Table 29.18 Girls Track & Field Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	4	36.4%
1-2 Days	1	9.1%
3-6 Days	0	0.0%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	6	54.5%
TOTAL	11	100.0%

Table 29.19 Girls Track & Field Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	1	9.1%
6-10 Days	1	9.1%
11-15 Days	2	18.2%
16-20 Days	1	9.1%
≥21 Days	0	0.0%
Data not available**	6	54.5%
TOTAL	11	100.0%

0 Missing Follow-up Reports*

6 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

0 Data entry errors**

XXX. Volleyball Head Injury Reports

Table 30.1 Head Injury Prevalence Rate for Volleyball, MHSAA Head Injury Reporting System, 2024-25 School Year

Volleyball Participation	19,679
All Reported Volleyball Head Injuries	177
Volleyball Head Injury Prevalence Rate (reported head injuries/total participants)	0.90%
Volleyball Head Injury Prevalence Rate Per Thousand Participants	9

Table 30.2 Volleyball Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	92	52.0%
Junior Varsity	57	32.2%
Freshman	28	15.8%
TOTAL	177	100.0%

Table 30.3 Volleyball Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	63	35.6%
Competition	114	64.4%
TOTAL	177	100.0%

Table 30.4 Volleyball Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	10	15.9%
Middle of practice	28	44.4%
End of practice	25	39.7%
PRACTICE TOTAL	63	100.0%
Start of competition	21	18.4%
Middle of competition	58	50.9%
End of competition	35	30.7%
COMPETITION TOTAL	114	100.0%

Table 30.5 Activity Type for Volleyball Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	51	81.0%
During simulated competition-scrimmage	11	17.5%
Not specified	1	1.6%
TOTAL	63	100.0%

Table 30.6 Injury Occurred While Playing Offense, Defense, or Special Teams for Volleyball Head Injuries, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Offense	9	5.1%
Defense	28	15.8%
Special Teams	0	0.0%
Unknown	36	20.3%
Not Applicable	104	58.8%
TOTAL	177	100.0%

Table 30.7 Volleyball Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	32	18.1%
Person to object contact (e.g. wall, equipment)	104	58.8%
Person to playing surface contact	36	20.3%
Uncertain as to the cause of the event	5	2.8%
TOTAL	177	100.0%

Table 30.8 Person to Playing Surface Contact Volleyball Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Wooded gym floor	33	91.7%
Volleyball court	1	2.8%
Natural grass	2	5.6%
TOTAL	36	100.0%

Table 30.9 Volleyball Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Wooded gym floor	139	78.5%
Volleyball court	20	11.3%
Natural grass	3	1.7%
Other	15	8.5%
TOTAL	177	100.0%

Table 30.10 Volleyball Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	54	30.5%
Coach	46	26.0%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	2	1.1%
DO	1	0.6%
MD	1	0.6%
PA	0	0.0%
NP	1	0.6%
Athletic director	1	0.6%
Not initially examined at the time of the suspected head injury	48	27.1%
Multiple examiners	23	13.0%
TOTAL	177	100.0%

Table 30.11 Volleyball Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	119	67.2%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	2	1.1%
NOT removed from activity at the time of the injury event*	56	31.6%
TOTAL	177	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 30.12 Volleyball Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	20	11.3%
No reported previous concussions	157	88.7%
TOTAL	177	100.0%

Table 30.13 Most Recent Concussion for Volleyball Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	2	10.0%
Within six months to one year	4	20.0%
Over one year	14	70.0%
TOTAL	20	100.0%

Table 30.14 Number of Previous Concussions for Volleyball Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	12	60.0%
2 concussions	4	20.0%
3 concussions	2	10.0%
≥4 concussions	1	5.0%
Not specified	1	5.0%
TOTAL	20	100.0%

Table 30.15 Volleyball Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	151	85.3%
Did not receive written authorization to return by the end of season	22	12.4%
Follow-up Report not completed	4	2.3%
TOTAL	177	100.0%

Table 30.16 Volleyball Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	77	43.5%
DO	30	16.9%
PA	12	6.8%
NP	32	18.1%
Medical examiner data not available*	26	14.7%
TOTAL	177	100.0%

Table 30.17 Volleyball Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	6	3.4%
Urgent or Ready Care business	12	6.8%
Primary care physician or pediatrician's office	105	59.3%
Neurologist's office	8	4.5%
Team doctor	20	11.3%
Medical facility data not available*	26	14.7%
TOTAL	177	100.0%

Table 30.18 Volleyball Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	138	78.0%
Conditions to return	13	7.3%
Return to activity data not available*	26	14.7%
TOTAL	177	100.0%

Table 30.19 Volleyball Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	91	51.4%
1-2 Days	46	26.0%
3-6 Days	11	6.2%
7-9 Days	1	0.6%
10-20 Days	2	1.1%
≥21 Days	0	0.0%
Missed school data not available*	26	14.7%
TOTAL	177	100.0%

Table 30.20 Volleyball Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	9	5.1%
3-5 Days	9	5.1%
6-10 Days	49	27.7%
11-15 Days	40	22.6%
16-20 Days	26	14.7%
≥21 Days	13	7.3%
Data not available**	31	17.5%
TOTAL	177	100.0%

4 Missing Follow-up Reports*

22 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

5 Data entry errors**

XXXI. Boys Wrestling Head Injury Reports

Table 31.1 Head Injury Prevalence Rate for Boys Wrestling, MHSAA Head Injury Reporting System, 2024-25 School Year

Wrestling Participation	10,917
All Reported Boys Wrestling Head Injuries	243
Wrestling Head Injury Prevalence Rate (reported head injuries/total participants)	2.23%
Wrestling Head Injury Prevalence Rate Per Thousand Participants	22

Table 31.2 Boys Wrestling Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	192	79.0%
Junior Varsity	51	21.0%
Freshman	0	0.0%
TOTAL	243	100.0%

Table 31.3 Boys Wrestling Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	106	43.6%
Competition	137	56.4%
TOTAL	243	100.0%

Table 31.4 Boys Wrestling Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	6	5.7%
Middle of practice	60	56.6%
End of practice	40	37.7%
PRACTICE TOTAL	106	100.0%
Start of competition	15	10.9%
Middle of competition	77	56.2%
End of competition	45	32.8%
COMPETITION TOTAL	137	100.0%

Table 31.5 Activity Type for Boys Wrestling Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	84	79.2%
During simulated competition-scrimmage	21	19.8%
Not specified	1	0.9%
TOTAL	106	100.0%

Table 31.6 Boys Wrestling Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	102	42.0%
Person to object contact (e.g. wall, equipment)	6	2.5%
Person to playing surface contact	112	46.1%
Uncertain as to the cause of the event	23	9.5%
TOTAL	243	100.0%

Table 31.7 Person to Playing Surface Contact Boys Wrestling Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Wrestling mat	103	92.0%
Athletic mat	7	6.3%
Wooden gym floor	2	1.8%
TOTAL	112	100.0%

Table 31.8 Boys Wrestling Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Wrestling mat	219	90.1%
Athletic mat	10	4.1%
Wooden gym floor	3	1.2%
Unknown/indiscernible surface data	11	4.5%
TOTAL	243	100.0%

Table 31.9 Boys Wrestling Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	121	49.8%
Coach	21	8.6%
Sideline emergency personnel	1	0.4%
Other appropriate health care professional	1	0.4%
DO	0	0.0%
MD	2	0.8%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	58	23.9%
Multiple examiners	39	16.0%
TOTAL	243	100.0%

Table 31.10 Boys Wrestling Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	173	71.2%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	3	1.2%
NOT removed from activity at the time of the injury event*	67	27.6%
TOTAL	243	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 31.11 Boys Wrestling Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	58	23.9%
No reported previous concussions	185	76.1%
TOTAL	243	100.0%

Table 31.12 Most Recent Concussion for Boys Wrestling Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	4	6.9%
Within one to six months	13	22.4%
Within six months to one year	12	20.7%
Over one year	29	50.0%
TOTAL	58	100.0%

Table 31.13 Number of Previous Concussions for Boys Wrestling Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	33	56.9%
2 concussions	10	17.2%
3 concussions	3	5.2%
≥4 concussions	5	8.6%
Not specified	7	12.1%
TOTAL	58	100.0%

Table 31.14 Boys Wrestling Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	187	77.0%
Did not receive written authorization to return by the end of season	53	21.8%
Follow-up Report not completed	3	1.2%
TOTAL	243	100.0%

Table 31.15 Boys Wrestling Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	84	34.6%
DO	41	16.9%
PA	25	10.3%
NP	37	15.2%
Medical examiner data not available*	56	23.0%
TOTAL	243	100.0%

Table 31.16 Boys Wrestling Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	5	2.1%
Urgent or Ready Care business	29	11.9%
Primary care physician or pediatrician's office	119	49.0%
Neurologist's office	11	4.5%
Team doctor	23	9.5%
Medical facility data not available*	56	23.0%
TOTAL	243	100.0%

Table 31.17 Boys Wrestling Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	173	71.2%
Conditions to return	14	5.8%
Return to activity data not available*	56	23.0%
TOTAL	243	100.0%

Table 31.18 Boys Wrestling Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	139	57.2%
1-2 Days	38	15.6%
3-6 Days	9	3.7%
7-9 Days	1	0.4%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	56	23.0%
TOTAL	243	100.0%

Table 31.19 Boys Wrestling Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	3	1.2%
3-5 Days	8	3.3%
6-10 Days	49	20.2%
11-15 Days	50	20.6%
16-20 Days	26	10.7%
≥21 Days	47	19.3%
Data not available**	60	24.7%
TOTAL	243	100.0%

3 Missing Follow-up Reports*

53 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

4 Data entry errors**

XXXI. Girls Wrestling Head Injury Reports

Table 32.1 Head Injury Prevalence Rate for Girls Wrestling, MHSAA Head Injury Reporting System, 2024-25 School Year

Wrestling Participation	1,505
All Reported Wrestling Head Injuries	31
Wrestling Head Injury Prevalence Rate (reported head injuries/total participants)	2.06%
Wrestling Head Injury Prevalence Rate Per Thousand Participants	21

Table 32.2 Girls Wrestling Head Injuries by Level of Competition, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Varsity	30	96.8%
Junior Varsity	1	3.2%
Freshman	0	0.0%
TOTAL	31	100.0%

Table 32.3 Girls Wrestling Head Injuries by Type of Exposure, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Practice	17	54.8%
Competition	14	45.2%
TOTAL	31	100.0%

Table 32.4 Girls Wrestling Head Injuries by Time during Practice or Competition of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Start of practice	0	0.0%
Middle of practice	11	64.7%
End of practice	6	35.3%
PRACTICE TOTAL	17	100.0%
Start of competition	2	14.3%
Middle of competition	3	21.4%
End of competition	9	64.3%
COMPETITION TOTAL	14	100.0%

Table 32.5 Activity Type for Girls Wrestling Head Injury Events during Practice, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
During a drill	12	70.6%
During simulated competition-scrimmage	5	29.4%
Not specified	0	0.0%
TOTAL	17	100.0%

Table 32.6 Girls Wrestling Head Injuries by Cause of Injury, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Person to person contact	8	25.8%
Person to object contact (e.g. wall, equipment)	0	0.0%
Person to playing surface contact	20	64.5%
Uncertain as to the cause of the event	3	9.7%
TOTAL	31	100.0%

Table 32.7 Person to Playing Surface Contact Girls Wrestling Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Wrestling mat	20	100.0%
Athletic mat	0	0.0%
Wooden gym floor	0	0.0%
TOTAL	20	100.0%

Table 32.8 Girls Wrestling Head Injuries by Surface Type, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Wrestling mat	29	93.5%
Wooden gym floor	1	3.2%
Unknown/indiscernible surface data	1	3.2%
TOTAL	31	100.0%

Table 32.9 Girls Wrestling Head Injuries by Initial Examiner, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Athletic trainer	20	64.5%
Coach	3	9.7%
Sideline emergency personnel	0	0.0%
Other appropriate health care professional	0	0.0%
DO	0	0.0%
MD	0	0.0%
PA	0	0.0%
NP	0	0.0%
Athletic director	0	0.0%
Not initially examined at the time of the suspected head injury	6	19.4%
Multiple examiners	2	6.5%
TOTAL	31	100.0%

Table 32.10 Girls Wrestling Athlete Removal from Activity at the Time of Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Removed from activity at the time of the injury event, & DID NOT return to activity on the day of the injury event	25	80.6%
Removed from activity at the time of the injury event, & returned to activity on the day of the injury event*	0	0.0%
NOT removed from activity at the time of the injury event*	6	19.4%
TOTAL	31	100.0%

*Not indicating the injury was mismanaged at the time of the event; athlete may not have reported injury, symptoms may not have presented until after the event, etc.

Table 32.11 Girls Wrestling Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Reported at least one previous concussion	6	19.4%
No reported previous concussions	25	80.6%
TOTAL	31	100.0%

Table 32.12 Most Recent Concussion for Girls Wrestling Athletes Reporting Previous Concussions after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Within last month	0	0.0%
Within one to six months	2	33.3%
Within six months to one year	1	16.7%
Over one year	3	50.0%
TOTAL	6	100.0%

Table 32.13 Number of Previous Concussions for Girls Wrestling Athletes Reporting Previous Concussion after Head Injury Event, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1 concussion	6	100.0%
2 concussions	0	0.0%
3 concussions	0	0.0%
≥4 concussions	0	0.0%
Not specified	0	0.0%
TOTAL	6	100.0%

Table 32.14 Girls Wrestling Head Injuries by Athlete Clearance to Return to Activity before the End of Season in which the Injury Occurred, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Received written authorization to return by the end of season	24	77.4%
Did not receive written authorization to return by the end of season	7	22.6%
Follow-up Report not completed	0	0.0%
TOTAL	31	100.0%

Table 32.15 Girls Wrestling Head Injuries by Medical Examiner Authorizing Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
MD	8	25.8%
DO	5	16.1%
PA	2	6.5%
NP	9	29.0%
Medical examiner data not available*	7	22.6%
TOTAL	31	100.0%

Table 32.16 Girls Wrestling Head Injuries by Facility where Medical Examiner Authorized Return to Activity, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Hospital	1	3.2%
Urgent or Ready Care business	4	12.9%
Primary care physician or pediatrician's office	15	48.4%
Neurologist's office	1	3.2%
Team doctor	3	9.7%
Medical facility data not available*	7	22.6%
TOTAL	31	100.0%

Table 32.17 Girls Wrestling Head Injuries by Clearance to Return to Activity Conditions, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
Unconditional return	23	74.2%
Conditions to return	1	3.2%
Return to activity data not available*	7	22.6%
TOTAL	31	100.0%

Table 32.18 Girls Wrestling Head Injuries by Missed School Days after Injury Event Date, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
0 Days	18	58.1%
1-2 Days	6	19.4%
3-6 Days	0	0.0%
7-9 Days	0	0.0%
10-20 Days	0	0.0%
≥21 Days	0	0.0%
Missed school data not available*	7	22.6%
TOTAL	31	100.0%

Table 32.19 Girls Wrestling Head Injuries by Time between Head Injury Event Date and Authorization Date to Return, MHSAA Head Injury Reporting System, 2024-25 School Year

	n	%
1-2 Days	0	0.0%
3-5 Days	1	3.2%
6-10 Days	8	25.8%
11-15 Days	6	19.4%
16-20 Days	5	16.1%
≥21 Days	3	9.7%
Data not available**	8	25.8%
TOTAL	31	100.0%

0 Missing Follow-up Reports*

7 Did not receive clearance to return to activity before the end of season (thus no follow-up data)*

1 Data entry errors**

XXXIII. Year Over Year Comparison

**Table 32.1 Head Injury Reports by Sport and Year, MHSAA Head Injury Reporting System, 2024-25
School Year**

SPORTS	Boys*										Girls									
	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	22-23	24-25
Baseball	65	70	60	73	2	41	53	58	41	41	-	-	-	-	-	-	-	-	-	-
Basketball	247	168	182	142	186	87	123	185	156	133	454	371	337	302	319	136	279	273	273	239
Bowling	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Competitive Cheer	-	-	-	-	-	-	-	-	-	-	122	150	131	135	137	51	96	127	127	68
Cross Country	4	1	1	3	4	1	3	0	3	0	4	6	3	7	2	1	2	3	3	4
Football - 11-Player	1,907	1,647	1,469	1,514	1,423	685	997	1,190	1,224	1,309	-	-	-	-	-	-	-	-	-	-
8-Player	32	37	53	43	56	27	53	110	71	76	-	-	-	-	-	-	-	-	-	-
Golf	1	1	0	2	0	0	1	1	1	0	2	1	0	0	2	0	1	1	1	0
Gymnastics	-	-	-	-	-	-	-	-	-	-	8	8	11	7	7	3	7	5	5	4
Ice Hockey	126	124	106	115	103	30	61	66	78	62	-	-	-	-	-	-	-	-	-	-
Lacrosse	85	92	87	88	0	50	65	71	83	91	30	55	57	65	1	41	65	44	44	47
Skiing-Alpine	3	3	5	5	4	2	2	3	3	4	6	2	1	2	12	3	4	4	4	4
Soccer	269	207	169	202	194	91	138	152	191	160	406	364	329	330	5	203	256	286	286	242
Softball	-	-	-	-	21	-	-	-	-	-	147	146	101	143	4	60	107	107	107	80
Swimming & Diving	14	11	14	19	1	2	11	7	7	9	31	33	25	26	39	15	31	24	24	19
Tennis	0	4	3	2	1	0	1	2	2	2	6	6	7	8	0	4	2	5	5	6
Track & Field	4	11	9	10	1	4	10	7	5	5	22	15	11	20	0	10	8	13	13	11
Volleyball	-	-	-	-	-	-	-	-	-	-	211	174	175	212	212	86	120	172	172	149
Wrestling	245	251	234	210	216	72	181	246	257	243	-	-	-	-	-	-	-	-	-	31

*Boys head injury data includes both males AND females playing on primarily male teams

Winter sports still in tournament play when activity was stopped due to the COVID-19 pandemic during the 2022-23 school year

Spring sports that had begun practice but not competition when activity was stopped due to the COVID-19 pandemic during the 2022-23 school year

Table 32.2 Head Injury Reports per 1,000 Participants by Sport and Year, MHSAA Head Injury Reporting System, 2024-25 School Year

SPORTS	Boys*										Girls										
	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	22-23	24-25	
Baseball	3.58	3.89	3.39	4.24	0.12	2.55	3.21	3.48	2.51	2.55	-	-	-	-	-	-	-	-	-	-	
Basketball	11.48	7.90	8.52	6.72	8.85	4.62	6.14	8.95	7.72	6.47	29.18	23.34	21.53	19.64	21.08	10.31	20.52	19.80	19.80	18.30	
Bowling	0.26	0.00	0.00	0.23	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
Competitive Cheer	-	-	-	-	-	-	-	-	-	-	17.28	22.32	19.51	20.23	20.86	9.82	16.72	21.37	21.37	10.76	
Cross Country	0.43	0.11	0.10	0.31	0.42	0.12	0.37	0.00	0.38	0.00	0.48	0.71	0.34	0.86	0.25	0.14	0.28	0.44	0.44	0.59	
Football - 11-Player	49.41	45.04	41.28	44.58	43.48	22.28	32.07	36.72	37.58	39.07	-	-	-	-	-	-	-	-	-	-	
8-Player	34.48	32.34	37.70	29.66	34.76	15.34	24.09	42.49	27.31	28.11	-	-	-	-	-	-	-	-	-	-	
Golf	0.16	0.16	0.00	0.32	0.00	0.00	0.15	0.14	0.14	0.00	0.58	0.28	0.00	0.00	0.55	0.00	0.26	0.27	0.27	0.00	
Gymnastics	-	-	-	-	-	-	-	-	-	-	12.54	12.58	15.67	10.09	10.51	4.89	11.97	8.90	8.90	8.05	
Ice Hockey	37.59	36.35	31.50	34.91	31.48	9.28	19.22	21.09	24.94	19.95	-	-	-	-	-	-	-	-	-	-	
Lacrosse	17.16	17.99	16.83	16.18	0.00	11.09	13.62	14.09	15.85	18.06	10.81	19.55	19.66	20.44	0.31	14.76	21.29	13.69	13.69	14.72	
Skiing-Alpine	4.17	3.58	6.02	5.41	4.35	2.44	2.00	3.24	3.65	5.25	9.20	2.68	1.30	2.62	15.27	3.86	4.78	4.68	4.68	5.50	
Soccer	18.46	14.15	11.56	13.94	13.60	6.90	10.49	11.45	13.69	11.34	30.37	27.55	24.89	24.98	0.40	18.24	21.65	24.11	24.11	20.32	
Softball	-	-	-	-	-	-	-	-	-	-	10.66	10.70	7.42	10.76	0.32	5.27	9.07	9.13	9.13	7.04	
Swimming & Diving	2.96	2.21	2.75	3.80	4.15	0.49	2.52	1.68	1.73	2.21	5.76	5.89	4.36	4.49	7.12	2.93	5.99	4.87	4.87	4.09	
Tennis	0.00	0.66	0.49	0.32	0.16	0.00	0.16	0.33	0.34	0.32	0.69	0.67	0.77	0.86	0.00	0.56	0.25	0.61	0.61	0.63	
Track & Field	0.18	0.47	0.38	0.42	0.05	0.23	0.45	0.30	0.21	0.20	1.32	0.88	0.64	1.15	0.00	0.78	0.51	0.79	0.79	0.61	
Volleyball	-	-	-	-	-	-	-	-	-	-	10.88	9.13	9.01	11.12	11.01	4.67	6.38	8.93	8.93	8.99	
Wrestling	25.52	26.15	24.90	22.12	22.09	9.50	19.98	23.48	21.75	22.26	-	-	-	-	-	-	-	-	-	20.60	

*Boys head injury data includes both males AND females playing on primarily male teams

Winter sports still in tournament play when activity was stopped due to the COVID-19 pandemic during the 2022-23 school year

Spring sports that had begun practice but not competition when activity was stopped due to the COVID-19 pandemic during the 2022-23 school year

XXXIII. Executive Summary

33.1 Introduction

In May of 2015, the Representative Council of the Michigan High School Athletic Association approved two long-term additions to the history of efforts by MHSAA's member schools to promote and protect participant health.

- Concussion care “gap” insurance was provided by the MHSAA without cost to member schools or students' families, covering practices and competition for all levels of all MHSAA sports, 7th through 12th grades. The coverage was extended to 6th-graders in 2016-17. That coverage continued in 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, 2022-23, 2023-24, and 2024-25 school years. The coverage will continue in 2025-26.
- Concussion reporting was required for all MHSAA member high schools for all head injury events taking place during in-season practices and competitions in all levels of all MHSAA sports. That requirement continues.

The purpose of mandated concussion reporting is not to identify areas of the state or individual schools or teams that are above or below average in terms of the number of concussions reported. The intended purpose is to help identify the significant broad themes and questions that might be researched to help point school-sponsored sports leadership toward policies and procedures that will tend to improve the experience of students in interscholastic athletic programs of Michigan and beyond.

This Executive Summary is based on confirmed Head Injury Reports submitted for MHSAA-supported sports sponsored and conducted at the MHSAA's member high schools during the 2015-16, 2016-17, 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, 2022-23, 2023-24, and 2024-25 school years.

33.2 Ranking

SPORT	PARTICIPANTS	HEAD INJURY REPORTS	HEAD INJURY REPORTS PER THOUSAND PARTICIPANTS	HEAD INJURIES PER THOUSAND PARTICIPANTS RATE RANK OUT OF ALL MHSAA SPORTS
Football - 11 player	33,506	1,309	39	1
Football 8-player	2,704	76	28	2
Boys Wrestling	10,917	243	22	3
Girls Wrestling	1,505	31	21	4
Girls Soccer	11,909	242	20	5
Ice Hockey	3107	62	20	6
Girls Basketball	13,063	239	18	7
Boys Lacrosse	5,038	91	18	8
Girls Lacrosse	3,194	47	15	9
Boys Soccer	14,112	160	11	10
Competitive Cheer	6,319	68	11	11
Volleyball	19,679	177	9	12
Gymnastics	497	4	8	13
Softball	11,368	80	7	14
Boys Basketball	20,541	133	6	15
Girls Skiing	727	4	6	16
Boys Skiing	762	4	5	17
Girls Swimming & Diving	4,648	19	4	18
Baseball	16,057	41	3	19
Boys Swimming & Diving	4,073	9	2	20
Girls Tennis	9,485	6	1	21
Girls Track & Field	18,108	11	1	22
Girls Cross Country	6,826	4	1	23
Girls Bowling	2,689	1	0	24
Boys Tennis	6,163	2	0	25
Boys Track & Field	24,759	5	0	26
Boys Bowling	4,333	0	0	27
Boys Cross Country	8,209	0	0	27
Boys Golf	7,416	0	0	27
Girls Golf	3,970	0	0	27

33.3 Observations of Year #10 (2024-25)

During the 2024-25 school year, MHSAA member schools submitted **3,527 suspected concussion reports** to the Head Injury Reporting System. Of these:

- **8 reports** were duplicates and removed.
- **10 reports** were excluded due to entry errors (injuries occurred in the previous school year).
- **78 reports** involved injury events that occurred either out of season or in non-MHSAA activities (e.g., club sports, gym class, car accidents).
- **82 reports** were related to sideline cheerleading, a sport not sponsored by the MHSAA for postseason competition, and were not included.
- **183 reports** were determined not to be concussions and were excluded from the 2024-25 Summary Report.
- **98 reports** involved middle school students. Because middle school reporting is voluntary and participation remains limited, these reports were not included.

With these deletions and exclusions, **3,068 head injury reports** were included in the 2024-25 Summary Report. This represents a **0.9% decrease** from the **3,097 reports** submitted in 2023-24.

11-player football, 8-player football, girls soccer, ice hockey, boys wrestling, girls wrestling, and girls basketball continue to report the highest head injury rates. These seven sports have consistently ranked in the top seven in every year of reporting when all three seasons were completed without interruption.

Competitive Cheer

- Head injury reporting rates in 2024-25 were generally consistent with 2023-24, with one notable exception: **competitive cheer**.
- Reports declined from **21 per 1,000 participants in 2023-24** to **11 per 1,000 participants in 2024-25**.

- This decrease is likely due to the MHSAA's efforts to capture **sideline cheerleading head injuries separately**, which revealed that some had previously been misclassified as competitive cheer reports.
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Wrestling

- The 2024-25 school year marked the first time that **girls wrestling** was tracked separately from **boys wrestling**.
 - Head injury reporting rates were nearly similar: **21 per 1,000 participants for girls** and **22 per 1,000 participants for boys**.
-

Football

- In **8-player football**, head injury rates remained stable for the second consecutive year, with **28 per 1,000 participants in 2024-25**, following **27 in 2023-24**.
 - This stability follows a **75% increase in 2022-23**, when rates rose from **24 in 2021-22** to **42 in 2022-23**.
 - Notably, 2022-23 was the first time in nine years of data collection that **11-player football did not record the highest head injury rate**.
 - **11-Player Football historical rates (per 1,000 participants):**
 - 2015 – 49 | 2016 – 45 | 2017 – 41 | 2018 – 45 | 2019 – 43 | 2020 – 22 | 2021 – 32 | 2022 – 37 | 2023 – 37 | 2024 – 39
 - **8-Player Football historical rates (per 1,000 participants):**
 - 2015 – 34 | 2016 – 32 | 2017 – 38 | 2018 – 30 | 2019 – 35 | 2020 – 15 | 2021 – 24 | 2022 – 42 | 2023 – 27 | 2024 – 28
 - The 2024 rate is consistent with 2015–2021 levels, suggesting the spike in 2022 was an anomaly.
 - Beginning in 2023-24, concussion reports for football included data on the player's role at the time of injury:
 - **11-Player Football (2024):** 24.7% offense; 24.8% defense; 5.6% special teams; 41.4% unknown; 3.5% not applicable.
 - **8-Player Football (2024):** 30.3% offense; 21.1% defense; 10.5% special teams; 36.8% unknown; 1.3% not applicable.
-

Gender Comparisons

- In sports conducted under the same or similar playing rules for both genders, **female athletes continue to report significantly higher concussion rates:**
 - Girls Soccer – 20 per 1,000 (5th) | Boys Soccer – 11 per 1,000 (10th)
 - Girls Basketball – 18 per 1,000 (7th) | Boys Basketball – 6 per 1,000 (15th)
 - Softball – 7 per 1,000 (14th) | Baseball – 3 per 1,000 (19th)
 - The notable exception is **wrestling**, where boys and girls report nearly identical rates:
 - Boys Wrestling – 21 per 1,000 (3rd) | Girls Wrestling – 22 per 1,000 (4th)
-

Competition vs. Practice

- Consistent with prior years, the majority of reported concussions (**68.9%**) occurred during **competition**.
 - In nearly all MHSAA sports, two-thirds or more of concussions were sustained in competition.
 - **Competitive cheer** remains the exception: **88.2% of concussions in practice, 11.8% in competition**.
-

Timing of Evaluation and Removal

- In **20.5%** of reported concussions, students were **not initially examined** at the time of the suspected injury. This by no means indicates the injuries were mismanaged as many factors – including delayed symptom onset, lack of reporting, or students concealing symptoms – may have impacted the students initial examination.
- Initial evaluation at the time of injury:
 - **49.8%** by an athletic trainer
 - **15.6%** by multiple examiners
 - **11.8%** by a coach

- **74.6%** of students diagnosed with a concussion were **removed from activity immediately**.
 - **24.1%** were **not removed at the time of the incident**.
 - **1.3%** were initially removed but later returned to activity the same day before ultimately being diagnosed. Again, these figures do not necessarily indicate mismanagement, as symptoms may not have been apparent at the time.
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Follow-Up and Clearance Documentation

- At the time of this summary, **84 reports (2.7%)** did not have an Online Follow-up Report completed.
- The MHSAA received **484 Return to Activity and Post-Concussion Consent Forms** (15.8% of cases where clearance was expected).

This does not necessarily indicate students were returning without clearance; rather, documentation may be kept locally and not submitted to the MHSAA.

- Clearance documentation received in previous years:
 - 2016-17 – 46.0% | 2017-18 – 40.5% | 2018-19 – 37.9% | 2019-20 – 30.3% | 2020-21 – 16.2% | 2021-22 – 23.1% | 2022-23 – 20.0% | 2023-24 – 20.2% | 2024-25 – 15.8%
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Seasonal Reporting by Schools

- **Fall 2024-25:**
 - 503 schools reported concussions.
 - 193 schools reported zero concussions.
 - 21 schools did not sponsor Fall sports.
 - 11 schools did not respond.
- **Winter 2024-25:**
 - 396 schools reported concussions.
 - 324 schools reported zero concussions.
 - 14 schools did not sponsor Winter sports.
 - 14 schools did not respond.
 - The 324 schools reporting zero concussions represent a **26.7% increase** from 285 schools in Winter 2023-24.

- **Spring 2024-25:**
 - 296 schools reported concussions.
 - 418 schools reported zero concussions.
 - 27 schools did not sponsor Spring sports.
 - 12 schools did not respond.
 - The 418 schools reporting zero concussions represent an **11.1% increase** from 376 schools in Spring 2023-24.

33.4 Emerging Inquires for Year #11 (2025-26)

A. Documentation and Compliance

The 2024-25 school year saw only 15.8% of Return to Activity and Post-Concussion Consent Forms submitted to the MHSAA, continuing a steady decline from previous years. While this does not necessarily indicate that students are returning without clearance, it does highlight challenges with documentation compliance. The MHSAA must explore strategies to support schools in meeting protocol requirements while minimizing administrative burden. This may include revisiting digital submission options, clarifying expectations, or enhancing training for athletic staff. Continued monitoring will be important to ensure concussion protocols are followed consistently across all member schools.

B. Cheerleading Classification

The improved separation of sideline cheerleading and competitive cheer head injury reports in 2024-25 revealed more accurate rates for both activities. Competitive cheer reports declined significantly, suggesting prior years may have included misclassified sideline injuries. Continued emphasis on accurate reporting categories will be essential to ensure data integrity. The MHSAA will monitor these patterns moving forward and work with schools to provide clear guidance on reporting cheer-related injuries.

C. Role-Specific Football Data

The second year of collecting concussion data by player role (offense, defense, special teams) in football again produced meaningful insights, with injuries spread relatively evenly across offense and defense, and fewer on special teams. While still early, this data may help guide future adjustments in practice structure, game rules, or protective equipment education. The MHSAA will continue tracking these trends and reviewing whether additional sport-specific recommendations are warranted.

D. Recognition and Removal Practices

In 2024-25, 20.5% of concussions were not initially examined at the time of injury, and 24.1% of students diagnosed with a concussion were not removed from activity immediately. While these cases do not necessarily indicate mismanagement, they highlight ongoing challenges with symptom recognition, student reporting, and timely evaluation. Continued emphasis on coach, athlete, and parent education will be critical to ensure that all suspected head injuries result in immediate removal and appropriate medical follow-up.

E. School-Level Reporting Patterns

The number of schools attesting to zero concussions rose again in both Winter and Spring seasons. It remains unclear whether this trend reflects safer play, underreporting, or other factors. The MHSAA will continue to monitor these patterns and engage schools in discussions to verify accuracy and strengthen confidence in the reporting system.

33.5 Next Steps

The 2015-16 school year report first highlighted emerging themes, and by 2016-17 potential trends began to take shape. Data from subsequent years — including 2017-18, 2018-19, 2019-20, 2021-22, 2022-23, 2023-24, and now 2024-25 — has refined our understanding of those trends while continuing to raise new questions and areas for further study.

Importantly, the identification of questions does not require that action be delayed. It is not too soon to consider enhanced head protection and modified play and practice rules in sports consistently ranking among the top for head injury rates, including football, ice hockey, soccer, wrestling, and lacrosse.

At the same time, it remains critical to continue educating players, parents, coaches, officials, and school personnel to recognize and report concussion signs and symptoms — both those experienced personally and those observed in others. Increased awareness and prompt reporting remain essential tools in protecting student-athletes.

Looking ahead, the 2025-26 school year will begin with the expectation that nearly 100% of MHSAA member high schools will continue to submit initial and follow-up head injury reports for every level of every sponsored sport. Furthermore, each MHSAA Sport Committee will examine the 2024-25 concussion data in their sport to assist in the health and risk management of the participants. The MHSAA Sports Medicine Advisory Committee will review the data to furnish additional educational resources and address emerging issues.

The MHSAA also invites collaboration with colleges, universities, health care systems in Michigan, and the National Federation of State High School Associations to help address the evolving issues identified in this data and to advance the broader conversation on concussion safety.

Interested representatives of these organizations are encouraged to contact:

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