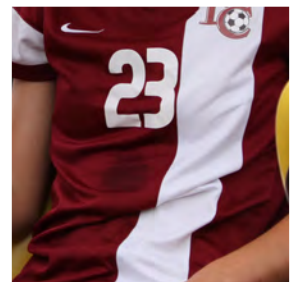
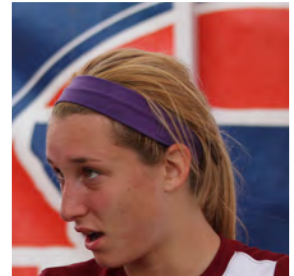
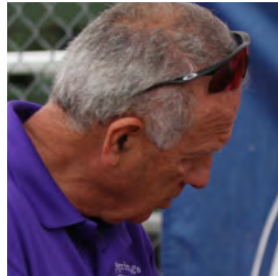
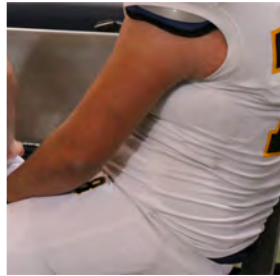


2016-2017



Interscholastic Youth Sports Brain Injury Report

MSHSAA

Missouri State High School Activities Association

Interscholastic Youth Sports Brain Injury Prevention Report

SCS HCS HB 300, 334, and 387 became law in August 2011, and it mandates that an organization with public schools as members must publish and distribute an annual report regarding the impact of student athlete concussions and head injuries which should include efforts that may be made to minimize damages from school sports injuries. The Department of Health and Senior Services, along with a statewide association of school boards [Missouri School Board Association (MSBA)], a statewide activities association that provides oversight for athletic or activity eligibility for students and school districts, [Missouri State High School Activities Association (MSHSAA)], and an organization named by the Department of Health and Senior Services that specializes in support services, education, and advocacy of those with brain injuries [Brain Injury Association of Missouri (BIA-MO)] developed guidelines, pertinent information, and forms to educate coaches, staff members, athletes, and parents or guardians of youth athletes of the nature and risk of concussion and brain injury including continuing to play after a concussion or a brain injury (1).

MSHSAA has distributed and updated head injury materials annually since August of 2009 to its member schools using a variety of sources (2). These materials provide information that will educate parents, coaches, staff members, and athletes on the prevention, management, and dangers of head injuries in interscholastic sports (3). In December of 2011, MSHSAA conducted its first annual survey of member schools and the impact of head injuries. During the summer of 2017, a seventh survey was conducted to collect data from the MSHSAA member schools. Seven hundred and twenty-eight schools were contacted to complete the survey (4). The survey window was from May 1 through July 30, 2017. Additional documentation not reported on the survey was forwarded by e-mail to greg@mshsaa.org and headinjury@mshsaa.org. Working with the Brain Injury Association of Missouri, Department of Health and Senior Services, Missouri Athletic Trainers Association, Missouri School Nurses Association and Missouri School Board Association a pilot program was put in place for the winter and spring of 2014-2017, Sports Concussions: Facts, Fallacies and New Frontiers. The program was conducted in five regional sites presenting a one day seminar educating staff members, coaches, nurses and Athletic trainers on the new research and policies pertaining to head injuries (5). Because of the great success and attendance of the program, it will once again be conducted at five regional sites in 2018.

Harvey Richards, Retired Associate Executive Director formerly in charge of Sports Medicine for MSHSAA, was a part of the state legislative process for the head injury bill (6). Greg Stahl is the current Assistant Executive Director in charge of Sports Medicine for MSHSAA, responsible for the distribution of educational materials to member schools, and conducted the 2016-17 Head Injury Survey (7).

- (1) Time table of meetings, Appendix A.
- (2) Fall membership mailing, e-mails, website (mshsaa.org), district in-services.
- (3) Educational packet for member schools, Appendix B.
- (4) 2016-17 Head Injury Survey, Appendix C.
- (5) Sports Concussions: Facts, Fallacies and New Frontiers, Appendix D.
- (6) Harvey Richards, Retired Associate Executive Director, 1 N Keene St, Columbia MO 65201; richarvey14@gmail.com
- (7) Greg Stahl, Assistant Executive Director, 1 N Keene St., Columbia, MO 65201; greg@mshsaa.org; (573) 875-4880.

Head Injury Survey

School Level	Total Schools			Completed Survey			Did Not Complete the Survey			% of Member Schools that Completed Survey		
	2017	2016	2015	2017	2016	2015	2017	2016	2015	2017	2016	2015
High Schools 9-12 and Combined Schools 7-12	590	590	589	503	526	530	87	64	59	85%	89%	90%

Use of Online Video

The National Federation of High School Activities (NFHS) has produced and made available for free, the online course “Concussions in Sports: What You Need to Know.” MSHSAA has approved this course for coaches to take as their educational component of the law. Many districts viewed this course as an in-service with the entire coaching staff, while others have taken it separately to meet this requirement. For the year July 1, 2016 through June 30, 2017, a total of 4,680 online courses were completed in Missouri.

Did your school district use the NFHS video “Concussion in Sports-What you Need to Know,” to educate your coaching staff for the 2016-17 school year?

Total Schools Responding: 503
 Yes: 454 (90%)
 No: 49 (10%)

Note: The 49 schools not using the NFHS online course chose to offer a district in-service to their coaches regarding the signs, symptoms and recognition of concussions.

The next table reflects the number of participants for each sport and/or activity by our member schools. This number will include duplicates for students who are in multiple activities. Music/Band, Sideline Cheerleading (Spirit) and Dance begin in the fall, but some schools will only participate in the winter or spring. The following table reflects the participation rates for the 2015-16 and 2016-17 school years.

High School Sport/Activity	Participants	
	2016-17	2015-16
Baseball	15,210	15,261
Sideline Cheerleading (Spirit)	9,616	9,795
Field Hockey	1,132	1,099
11-man Football	20,926	21,678
8-man Football	516	458
Dance/Pom Team	3,050	3,116
Water Polo	533	535
Winter Guard	932	1,026
Wrestling	6,730	6,479
Music-Band	22,866	23,662
Basketball-Boys	14,040	13,769
Cross Country-Boys	5,888	5,863
Cross Country-Girls	4,409	4,491
Soccer-Boys	8,726	8,608
Swimming and Diving-Boys	1,841	1,799
Softball-Girls	9,725	9,683
Tennis-Girls	3,979	3,837
Volleyball-Girls	10,270	10,362
Softball-Boys	0	103
Golf-Boys	3,779	3,870
Tennis-Boys	3,552	3,497
Track and Field-Boys	15,163	14,895
Volleyball-Boys	1,198	1,160
Basketball-Girls	10,154	9,999
Golf-Girls	1,896	1,846
Soccer-Girls	8,237	8,181
Swimming and Diving-Girls	3,195	2,848
Track and Field-Girls	12,084	11,845
Lacrosse-Girls	1,558	1,424
Totals	201,205	201,189

High School Sport/Activity	Total Participation
Sport	164,673
*Taking into Account 20% Duplication of Athletes	32,935
Total Adjustment Participation Sport	131,738
Activity	36,532
*Taking into Account 20% Duplication of Students	7,306
Total Adjustment Participation Activity	29,226
Total Adjustment Participation Sport/Activity	160,964

*20% duplication is only an estimate and not an actual number.

Data Collected

Schools were asked to provide information that related to possible head injuries. If signs or symptoms of a head injury were present, the student was to be withheld from that sport and or activity for a minimum of 24 hours and must have been seen by a medical professional. They must also provide to the school a *Return to Play* form before continuing the sport or activity. The information below is a reflection of those students who had to see a medical professional and provide a *Return to Play* form. Not all incidents would have resulted in a concussion.

HIGH SCHOOL ACTIVITIES

Level	Activity	Sport Related	Non-Sport Related	Days/Class Sport	Days/Class Non-Sport	Days Missed Sport	Days Missed Non-Sport	Diagnosed Sport	Diagnosed Non-Sport	Reporting Schools
HS	Scholar Bowl	0	0	0	0	0	0	0	0	0
HS	Sideline Cheerleading	285	14	387	17	5,407	231	271	14	110
HS	Music Activities	11	2	32	1	119	21	10	2	12
HS	Dance/Pom Team	28	7	41	12	502	194	26	7	23
HS	Speech and Debate	0	0	0	0	0	0	0	0	0
HS	Winter Guard	0	0	0	0	0	0	0	0	0
HS	Bass Fishing	0	0	0	0	0	0	0	0	0
HS	Bowling	0	0	0	0	0	0	0	0	0
HS	Chess	0	0	0	0	0	0	0	0	0
HS	Target Shooting	0	0	0	0	0	0	0	0	0
TOTAL		324	23	460	30	6,028	446	307	23	145

HIGH SCHOOL SPORTS

Level	Activity	Sport Related	Non-Sport Related	Days/Class Sport	Days/Class Non-Sport	Days Missed Sport	Days Missed Non-Sport	Diagnosed Sport	Diagnosed Non-Sport	Reporting Schools
HS	Baseball - Spring Season	64	10	113	18	758	474	58	10	52
HS	Basketball - Boys	149	13	144	30	1,704	221	137	13	111
HS	Basketball - Girls	226	19	317	23	3,210	282	218	18	145
HS	Cross Country - Boys	2	3	9	2	29	44	2	3	5
HS	Cross Country - Girls	5	7	2	12	72	69	6	7	11
HS	Field Hockey	13	1	11	0	145	5	13	1	9
HS	11-Man Football	1,325	49	1,421	48	17,838	295	1,238	49	240
HS	8-Man Football	11	0	17	0	121	0	10	0	10
HS	Golf - Boys	2	0	0	0	11	0	2	0	2
HS	Golf - Girls	0	2	0	2	0	28	0	2	1
HS	Soccer - Boys	239	11	239	6	3,891	151	218	11	117
HS	Soccer - Girls	336	15	407	10	5,693	175	305	14	132
HS	Softball - Boys	0	0	0	0	0	0	0	0	0
HS	Softball - Girls Fall Season	73	10	135	5	995	213	74	10	61
HS	Swimming & Diving - Boys	14	1	15	0	192	0	14	0	13
HS	Swimming & Diving - Girls	29	11	41	10	650	321	29	11	22
HS	Tennis - Boys	4	2	2	5	47	39	3	2	5
HS	Tennis - Girls	1	1	0	0	10	10	1	1	2
HS	Track and Field - Boys	18	8	6	11	158	108	14	8	20
HS	Track and Field - Girls	18	8	17	6	222	191	17	8	19
HS	Volleyball - Boys	2	0	2	0	17	0	2	0	1
HS	Volleyball - Girls	133	13	137	10	1,655	141	121	13	84
HS	Water Polo	15	1	8	0	195	11	14	1	9
HS	Wrestling	229	12	235	10	3,920	152	224	11	102
HS	Baseball - Fall Season	3	0	19	0	87	0	2	0	3
HS	Softball - Girls Spring Season	6	1	31	1	69	20	5	1	7
HS	Lacrosse - Girls	51	3	80	15	688	110	50	3	19
TOTAL		2,968	201	3,408	224	42,377	3,060	2,777	197	1,202

2016-17 Concussion Survey Results

Sports	Number of Athletic Reports	Number of Days Sport was Missed	Number of Days Class Time Missed
Male	2,077	28,968	2,230
Female	891	13,409	1,178
Total	2,968	42,377	3,408
Activities	Number of Activity Reports	Number of Days Activity was Missed	Number of Days Class Time Missed
Total	324	6,028	460
GRAND TOTAL	3,292	48,405	3,868

There were a total of 2,077 males and 891 females held out of practices and contests due to a head injury, for a total of 28,968 and 13,409 days respectively. This means that the male athletes were held out on an average of 13.9 days per incident and females were held out 15 days. This does show a good correlation to the gradual return-to-play guidelines, which indicates at a minimum 5-7 day return rate. The number of days that a student missed class time still remains a low number compared to the total number of days missed in the sport or activity.

2016-17 Top 7 Head Injury Sports/Activities	
Sport/Activity	Number of Head Injuries
Football	1,336
Soccer (G)	336
Sideline Cheerleading	285
Soccer (B)	239
Wrestling	229
Basketball (G)	226
Basketball (B)	149

2015-16 Top 7 Head Injury Sports/Activities	
Sport/Activity	Number of Head Injuries
Football	1,260
Soccer (G)	297
Sideline Cheerleading	260
Wrestling	233
Basketball (G)	228
Soccer (B)	187
Basketball (B)	174

According to the Article, *Athletic Trainer, Doctors Assess, Manage Most Concussions in High School Sports*: “Nearly half (47.2%) of the total number of concussions were sustained by football players.” Our data is reporting 40.6% of the total number is by football players.

2016-17 Percentage of Head Injuries per Total Occurrences	
Sport/Activity	% of total reported Head Injuries
Football	40.6%
Soccer (B/G)	17.5%
Basketball (B/G)	11.4%
Sideline Cheerleading	8.7%
Wrestling	7.0%

*Marar M. McIlvain NM, Fields SK, Comstock RD. Epidemiology of Concussions Among United States High School Athletes in 20 Sports. *Am J Sports Med* 2012;40(4):747-755.

Concussion Rates per 10,000 athletic exposures From the top 10 high school sports*	
Sport/Activity	Rate
Football	6.4 – 7.7
Soccer (G)	3.4
Wrestling	2.2
Basketball (G)	2.1
Soccer (B)	1.9
Basketball (B)	1.6
Sideline Cheerleading	1.4

MSHSAA Athletic exposure was calculated from the first day of practice to the end of districts for that sport. This is not a true actual count of participation but very accurate assumption. Example:

Football had on the average 72 days of practice and/or contests.
 $72 \times 21,442 \text{ participates} = 1,543,824 \text{ exposures.}$
 1,336 reported head injuries.

$$\frac{1,336}{1,543,824} = \frac{X}{10,000}$$

MSHSAA 2016-17 Concussion Rates per 10,000 Athletic Exposures	
Sport/Activity	Rate
Football	8.65
Soccer (G)	5.67
Wrestling	4.73
Basketball (G)	4.66
Sideline Cheerleading	4.11
Soccer (B)	3.80
Basketball (B)	1.47

There were several questions asked on this year's survey:

1. Does your school district have an emergency action plan in place for all home contest sites?
2. Does your school district have an emergency action plan in place for each sport/activity and each sport/activity venue that it uses (i.e., gym, baseball field, tennis court, etc.)?
3. Does your school district use the services of an athletic trainer or other medical support throughout the year (Practices - Contests)?
4. Does your school district have ambulance at all athletic contests?
5. If your school plays football, do you have an ambulance at the contests?

Below are the results from these questions:

High School Responses		
Question	Answer	Number of Responses
Does your school district have an emergency action plan in place for all home contest sites?	Yes	463
Does your school district have an emergency action plan in place for all home contest sites?	No	40
Does your school district have an emergency action plan in place for each sport/activity and each sport/activity venue that it uses (i.e., gym, baseball field, tennis court, etc.)?	Yes	429
Does your school district have an emergency action plan in place for each sport/activity and each sport/activity venue that it uses (i.e., gym, baseball field, tennis court, etc.)?	No	74
Does your school district use the services of an athletic trainer or other medical support throughout the year? (Practices - Contests)	No	157
Does your school district use the services of an athletic trainer or other medical support throughout the year? (Practices - Contests)	Yes Full time at the school for both practices and contests. (All levels)	138
Does your school district use the services of an athletic trainer or other medical support throughout the year? (Practices - Contests)	Yes Part-time, check-up on injuries and covering the contests. (All levels)	95
Does your school district use the services of an athletic trainer or other medical support throughout the year? (Practices - Contests)	Yes Part-time covering contests only. (All levels)	30
Does your school district use the services of an athletic trainer or other medical support throughout the year? (Practices - Contests)	Yes Part-time covering most of the varsity contests but not all.	83
Does your school district have ambulance at all athletic contests?	Yes	17
Does your school district have ambulance at all athletic contests?	No	486
If your school plays football, do you have an ambulance at the contests?	Yes, at the varsity games only.	132
If your school plays football, do you have an ambulance at the contests?	Yes, at all of the contests, Freshman, JV, and Varsity	119
If your school plays football, do you have an ambulance at the contests?	No, we do not have an ambulance at the contests.	73
If your school plays football, do you have an ambulance at the contests?	N/A, we do not play football.	179

There were a total of 503 responses to the questions, with 92% of the schools stating that they did have an emergency action plan in place for all home contest sites. This is a good number, but we want 100% of our schools to have, by site, emergency action plans in place for all home contest sites. These plans must also be practiced, just like their sport or activity, to make sure that they are successful.

There were 85% of the reporting schools indicating that they did have an emergency action plan in place for each sport/activity and sport/activity venue that it uses; for example, the gym, the baseball field, the tennis court, etc.

There were 157 schools that reported not using the services of an athletic trainer at their school. This means that 31% of our schools rely upon the coaches, administration and/or the school nurse to provide onsite medical attention. On the other hand, I was encouraged to see that 138 schools (27%) had full time athletic trainers for both practices and contests.

Only 17 schools reported having an ambulance at all of their contests during the school year (3%).

Football-playing schools at the high school level reported that 26% have an ambulance present at the varsity games only, with 24% covering all levels of football competition. It was reported that 15% of the schools did not have an ambulance at their home contest for any level of competition.

Educational materials were distributed to all member schools and are available for the public to access through our website (www.mshsaa.org). Awareness of this serious issue has come to the forefront. Several schools have requested an in-service to educate their coaching staff, with professionals conducting the program. Our staff, along with several others, has put programs in place to continue the educational effort and stay abreast of any new research available.

This past year, MSHSAA supported the Brain Injury Association of Missouri in putting together a program that was presented at five different locations in the state of Missouri: Sports Concussions: Facts, Fallacies and New Frontiers.

SEMINAR TOPICS included:

- Research Update
- Baseline Testing
- Sideline Assessment Actions by Non-Medical Team or School Personnel
- Return to Learn
- Encouraging Youth to Report Possible Concussion Symptoms
- Developing Concussion Management Protocols

MSHSAA will conduct an annual survey during each summer to collect year-long data. The Sports Medicine Committee will evaluate the questions and the report each September.

APPENDIX A

2016-17 Time Table of Meetings

Place	Date of Meeting
MSHSAA Office - Sports Medicine Committee	April 28, 2010
NFHS Summer Meeting - Sports Medicine Committee	July 6-9, 2010
Parkway School District - Concussion Presentation	August 12, 2010
MSHSAA Office - Sports Medicine Committee	January 6, 2011
Capitol, Jefferson City, MO - Concussion Bill	January 11, 2011
Capitol, Jefferson City, MO - Meeting – House Bill 300	February 7, 2011
Phone Conference - House Bill 300	February 25, 2011
St. Louis Children's Hospital - Press Conference House Bill 300	March 4, 2011
MSHSAA Office - Phone Conference - House Bill 300	March 7, 2011
NFHS Summer Meeting - Sports Medicine Committee	June 27 – July 1, 2011
MSHSAA Office - Conference Call - Concussions	August 16, 2011
MSHSAA Office - Concussion Meeting	August 25, 2011
MSHSAA Office - Sports Medicine Committee	January 5, 2012
Conference Call - Adult Brain Injury (MO Dept. of Health/Sr. Svc.)	January 19, 2012
Conference Call - Adult Brain Injury (MO Dept. of Health/Sr. Svc.)	February 14, 2012
Meeting in St. Louis - St. Louis Brain Association Meeting	March 1, 2012
Mercy Sports Medicine Conference - Exertional Heat Illnesses	March 30-31, 2012
MSHSAA Office - Adult Brain Injury (MO Dept. of Health/Sr. Svc.)	August 30, 2012
University of Missouri Research - Survey of all Injuries	June 1, 2012
Coaches Training Meeting (Chillicothe) - Head/Spinal Injuries (Hedrick Medical Building) - St. Luke's College of Health Sciences	October 12, 2012
MSHSAA Office - Sports Medicine Committee	December 13, 2012
MSHSAA Office - Meeting with Dr. Hubbard, St. Luke's	April 3, 2013
Conference Call - Brain Injury Association of Missouri	April 16, 2013
University of Missouri Research - Survey of all Injuries	June 2, 2013

NFHS Summer Meeting - Sports Medicine Committee	June 24-28, 2013
Stoney Creek Inn - Brain Injury Association of Missouri - Annual Meeting Planning	September 6, 2013
Coaches Training Meeting - St. Luke's College of Health Sciences	October 2, 2013
Conference Call - St. Luke's College of Health Sciences	October 23, 2013
Conference Call - University of Missouri Journalism - Concussion Interview	November 12, 2013
NFL – Chiefs - Head's Up Mom's Football Safety Clinic	December 3, 2013
MSHSAA Office - Sports Medicine Committee	December 12, 2013
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - Springfield, MO	January 14, 2014
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - Kansas City, MO	January 22, 2014
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - Columbia, MO	January 27, 2014
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - St. Louis, MO	February 4, 2014
NFHS Summer Meeting - Sports Medicine Committee	June 27 – July 2, 2014
Summer's AD Workshop - Emergency Action Planning	July 31, 2014
Stoney Creek Inn - Brain Injury Association of Missouri - Concussion Seminar Planning	October 8, 2014
MSHSAA Office - Sports Medicine Committee	December 11, 2014
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - Springfield, MO	January 16, 2015
NFHS Football Meeting - Indianapolis, IN	January 23-25, 2015
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - Columbia, MO	January 27, 2015
Missouri United Schools Insurance Council - Concussion Seminar - Lake of the Ozarks	January 29-30, 2015
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - St. Louis, MO	February 5, 2015
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - Kansas City, MO	February 12, 2015

MSHSAA Office - Sports Medicine Committee	February 18, 2015
USA/NFL Football Meeting - Indianapolis, IN	February 22, 2015
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - Cape Girardeau, MO	February 26, 2015
USA/NFL Football Meeting - New York, New York	March 26-27, 2015
MIAAA Meeting - Concussion Information Booth/Heads Up Football - Lake Ozark, MO	April 10-14, 2015
Sports Medicine Advisory Committee Meeting - Overuse Injuries in Baseball - Indianapolis, IN	June 8-10, 2015
NFHS Summer Meeting - Sports Medicine Committee - New Orleans, LA	June 26 – July 3, 2015
Officiate Missouri Day - St. Louis, MO	July 24-25, 2015
SERC Sports Medicine Symposium - Kansas City, MO	August 1, 2015
Brain Injury Association - Statewide Conference Call	August 18, 2015
KBIA Radio Interview - Athletic Trainers at High School Sporting Events	September 18, 2015
Brain Injury Association Meeting - St. Louis, MO	September 23, 2015
MSHSAA Office - Sports Medicine Committee	December 10, 2015
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - Columbia, MO	February 17, 2016
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - Cape Girardeau, MO	February 18, 2016
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - St. Louis, MO	February 22, 2016
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - Springfield, MO	February 25, 2016
USA/NFL Football Meeting - Indianapolis, IN	March 21-23, 2016
MIAAA Meeting - Concussion Information Booth - Lake Ozark, MO	April 8-12, 2016
NFHS Summer Meeting - Sports Medicine Committee - Reno, NV	June 28 – July 3, 2016
MSHSAA Office - Sports Medicine Committee	December 3, 2016
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - St. Louis, MO	January 26, 2017
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - Kansas City, MO	February 2, 2017

Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - Columbia, MO	February 9, 2017
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - Springfield, MO	February 23, 2017
Sports Concussion: Facts, Fallacies and New Frontiers - Brain Injury Association - Cape Girardeau, MO	March 2, 2017
Solutions for Safety in Sports Seminar - Kansas City, MO	March 28-29, 2017
MIAAAA Meeting - Concussion Information Booth – Head Injury Survey Info - Lake Ozark, MO	April 7-11, 2017
NFHS Summer Meeting - Sports Medicine Committee - Providence, RI	June 28 – July 3, 2017

APPENDIX B

REMINDERS For ALL ATHLETIC DIRECTORS

Concussion Information and Materials

- All coaches must take a course on the signs, symptoms, and prevention of concussions.
 - There is a free-of-charge course that is located on the NFHS Learning Center website (www.nfhslearn.com). Once there, go to the FREE/ELECTIVE COURSES section. Click on the right arrow until you come to the “Concussion in Sports – What You Need To Know” course.
 - There is also a link to this course on our website located at (www.mshsaa.org) located on the Sports Medicine Tab in the CONCUSSION section.
- All **parents and athletes** must receive and sign for the concussion materials as indicated on the MSHSAA Preparticipation Physical Form.
- The concussion information for parents and athletes can be found in the following three locations:
 - The free NFHS “Concussion in Sports” course described above;
 - The materials that are provided on our website (www.mshsaa.org) by clicking on the Sports Medicine Tab and then on “MSHSAA Concussion Information Packet;” and
 - The Concussion Information PowerPoint located on our website (www.mshsaa.org) by clicking on the Sports Medicine Tab and then on “MSHSAA Concussion Video Introduction.”
- **Athletic Directors** must keep accurate records of this information and be able to provide it to MSHSAA if asked to do so.

Emergency Action Planning Guide (HIGH SCHOOL ONLY)

- Enclosed in your packet is information for your school to set up and implement the “Anyone Can Save a Life” program.
- This program is free of charge.
- If you have any question, please contact me.

Online Sports Medicine Information

- Please note that printed copies of the MSHSAA Sports Medicine Manual are no longer being sent in the MSHSAA rules book mailings.
- The Sports Medicine information is located online by going to the MSHSAA website (www.mshsaa.org) and clicking on the Sports Medicine tab.

MSHSAA



All concussions are serious.
If you think you have a

CONCUSSION:

- * Don't hide it.
- * Report it.
- * Take time to recover.



It's better to miss one game
than the whole season.

For more information and to order additional materials
free-of-charge, visit: www.cdc.gov/Concussion.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION



Heads Up to Schools: KNOW YOUR CONCUSSION ABCs

Assess the situation | **B**e alert for signs and symptoms | **C**ontact a health care professional



A Fact Sheet for Parents

What is a concussion?

A concussion is a type of brain injury that changes the way the brain normally works. A concussion is caused by a bump, blow, or jolt to the head. Concussions can also occur from a blow to the body that causes the head and brain to move rapidly back and forth. Even what seems to be a mild bump to the head can be serious.

Concussions can have a more serious effect on a young, developing brain and need to be addressed correctly.

What are the signs and symptoms of a concussion?

You can't see a concussion. Signs and symptoms of concussion can show up right after an injury or may not appear or be noticed until hours or days after the injury. It is important to watch for changes in how your child or teen is acting or feeling, if symptoms are getting worse, or if s/he just "doesn't feel right." Most concussions occur without loss of consciousness.

If your child or teen reports *one or more* of the symptoms of concussion listed below, or if you notice the symptoms yourself, seek medical attention right away. Children and teens are among those at greatest risk for concussion.

SIGNS AND SYMPTOMS OF A CONCUSSION

SIGNS OBSERVED BY PARENTS OR GUARDIANS

- Appears dazed or stunned
- Is confused about events
- Answers questions slowly
- Repeats questions
- Can't recall events *prior* to the hit, bump, or fall
- Can't recall events *after* the hit, bump, or fall
- Loses consciousness (even briefly)
- Shows behavior or personality changes
- Forgets class schedule or assignments

SYMPTOMS REPORTED BY YOUR CHILD OR TEEN

Thinking/Remembering:

- Difficulty thinking clearly
- Difficulty concentrating or remembering
- Feeling more slowed down
- Feeling sluggish, hazy, foggy, or groggy

Physical:

- Headache or "pressure" in head
- Nausea or vomiting
- Balance problems or dizziness
- Fatigue or feeling tired
- Blurry or double vision
- Sensitivity to light or noise
- Numbness or tingling
- Does not "feel right"

Emotional:

- Irritable
- Sad
- More emotional than usual
- Nervous

Sleep*:

- Drowsy
- Sleeps *less* than usual
- Sleeps *more* than usual
- Has trouble falling asleep

**Only ask about sleep symptoms if the injury occurred on a prior day.*

To download this fact sheet in Spanish, please visit: www.cdc.gov/Concussion. Para obtener una copia electrónica de esta hoja de información en español, por favor visite: www.cdc.gov/Concussion.

DANGER SIGNS

Be alert for symptoms that worsen over time. Your child or teen should be seen in an emergency department right away if s/he has:

- One pupil (the black part in the middle of the eye) larger than the other
- Drowsiness or cannot be awakened
- A headache that gets worse and does not go away
- Weakness, numbness, or decreased coordination
- Repeated vomiting or nausea
- Slurred speech
- Convulsions or seizures
- Difficulty recognizing people or places
- Increasing confusion, restlessness, or agitation
- Unusual behavior
- Loss of consciousness (even a brief loss of consciousness should be taken seriously)

Children and teens with a concussion should **NEVER** return to sports or recreation activities on the same day the injury occurred. They should delay returning to their activities until a health care professional experienced in evaluating for concussion says they are symptom-free and it's OK to return to play. This means, until permitted, not returning to:

- Physical Education (PE) class,
- Sports practices or games, or
- Physical activity at recess.

What should I do if my child or teen has a concussion?

1. **Seek medical attention right away.** A health care professional experienced in evaluating for concussion can determine how serious the concussion is and when it is safe for your child or teen to return to normal activities, including physical activity and school (concentration and learning activities).
2. **Help them take time to get better.** If your child or teen has a concussion, her or his brain needs time to heal. Your child or teen may need to limit activities while s/he is recovering from a concussion. Exercising or activities that involve a lot of concentration, such as studying, working on the computer, or playing video games may cause concussion symptoms (such as headache or tiredness) to reappear or get worse. After a concussion, physical and cognitive activities—such as concentration and learning—should be carefully managed and monitored by a health care professional.
3. **Together with your child or teen, learn more about concussions.** Talk about the potential long-term effects of concussion and the dangers of returning too soon to normal activities (especially physical activity and learning/concentration). For more information about concussion and free resources, visit: www.cdc.gov/Concussion.

How can I help my child return to school safely after a concussion?

Help your child or teen get needed support when returning to school after a concussion. Talk with your child's teachers, school nurse, coach, speech-language pathologist, or counselor about your child's concussion and symptoms. Your child may feel frustrated, sad, and even angry because s/he cannot return to recreation and sports right away, or cannot keep up with schoolwork. Your child may also feel isolated from peers and social networks. Talk often with your child about these issues and offer your support and encouragement. As your child's symptoms decrease, the extra help or support can be removed gradually. Children and teens who return to school after a concussion may need to:

- Take rest breaks as needed,
- Spend fewer hours at school,
- Be given more time to take tests or complete assignments,
- Receive help with schoolwork, and/or
- Reduce time spent reading, writing, or on the computer.

*To learn more about concussion and to order materials **FREE-OF-CHARGE**, go to: www.cdc.gov/Concussion or call 1.800.CDC.INFO.

HEADS+UP

CONCUSSION IN HIGH SCHOOL SPORTS

A FACT SHEET FOR **ATHLETES**

What is a concussion?

A concussion is a brain injury that:

- Is caused by a bump, blow, or jolt to the head or body.
- Can change the way your brain normally works.
- Can occur during practices or games in any sport or recreational activity.
- Can happen even if you haven't been knocked out.
- Can be serious even if you've just been "dinged" or "had your bell rung."

All concussions are serious. A concussion can affect your ability to do schoolwork and other activities (such as playing video games, working on a computer, studying, driving, or exercising). Most people with a concussion get better, but it is important to give your brain time to heal.

What are the symptoms of a concussion?

You can't see a concussion, but you might notice **one or more** of the symptoms listed below or that you "don't feel right" soon after, a few days after, or even weeks after the injury.

- Headache or "pressure" in head
- Nausea or vomiting
- Balance problems or dizziness
- Double or blurry vision
- Bothered by light or noise
- Feeling sluggish, hazy, foggy, or groggy
- Difficulty paying attention
- Memory problems
- Confusion

What should I do if I think I have a concussion?

- **Tell your coaches and your parents.** Never ignore a bump or blow to the head even if you feel fine. Also, tell your coach right away if you think you have a concussion or if one of your teammates might have a concussion.
- **Get a medical check-up.** A doctor or other health care professional can tell if you have a concussion and when it is OK to return to play.
- **Give yourself time to get better.** If you have a concussion, your brain needs time to heal. While your brain is still healing, you are much more likely to have another concussion. Repeat concussions can increase the time it takes for you to recover and may cause more damage to your brain. It is important to rest and not return to play until you get the OK from your health care professional that you are symptom-free.

How can I prevent a concussion?

Every sport is different, but there are steps you can take to protect yourself.

- Use the proper sports equipment, including personal protective equipment. In order for equipment to protect you, it must be:
 - The right equipment for the game, position, or activity
 - Worn correctly and the correct size and fit
 - Used every time you play or practice
- Follow your coach's rules for safety and the rules of the sport.
- Practice good sportsmanship at all times.

If you think you have a concussion:
Don't hide it. Report it. Take time to recover.

It's better to miss one game than the whole season.

For more information and to order additional materials **free-of-charge**, visit: www.cdc.gov/Concussion.

MSHSAA Concussion Return to Play Form

If diagnosed with a concussion, an athlete must be cleared for progression to activity by an approved healthcare provider, MD/DO/PAC/LAT/ARNP/Neuropsychologist (Emergency Room physician cannot clear for progression).

Athlete's Name: _____ DOB: _____ Date of Injury: _____

THIS RETURN TO PLAY IS BASED ON TODAY'S EVALUATION

Date of Evaluation: _____ Return to School On (Date): _____

The following are the return to physical activities recommendations at the present time:

- Diagnosed with a concussion: Cannot return to physical activity, sport or competition (must be re-evaluated).
- Diagnosed with a concussion: May return to sports participation under the supervision of your school's administration after completing the return to play protocol (see below).
- Not diagnosed with a concussion. Patient has diagnosis of _____ and MAY/MAY NOT return to play at this time.

Medical Office Information (Please Print/Stamp):

Evaluator's Name: _____ Office Phone: _____

Evaluator's Signature: _____

Evaluator's Address: _____

Return to Play (RTP) Procedures After a Concussion

Return to activity and play is a medical decision. Progression is individualized, must be closely supervised according to the school's policies and procedures, and will be determined on a case-by-case basis. Factors that may affect the rate of progression include: previous history of concussion, duration and type of symptoms, age of the athlete, and sport/activity in which the athlete participates. An athlete with a prior history of concussion, one who has had an extended duration of symptoms, or one who is participating in a collision or contact sport may be progressed more slowly as determined by the healthcare provider who has evaluated the athlete. After the student has not experienced symptoms attributable to the concussion for a **minimum of 24 hours** and has returned to school on a full-time basis (if school is in session), the stepwise progression below shall be followed:

- Step 1:** Light cardiovascular exercise.
- Step 2:** Running in the gym or on the field. No helmet or other equipment.
- Step 3:** Non-contact training drills in full equipment. Weight-training can begin.
- Step 4:** Full, normal practice or training (a walk-through practice does not count as a full, normal practice).
- Step 5:** **Full participation.** Must be cleared by MD/DO/PAC/LAT/ARNP/Neuropsychologist before returning to play.

The athlete should spend a minimum of one day at each step before advancing to the next. If concussion symptoms return with any step, the athlete must stop the activity and the treating healthcare provider must be contacted. Depending upon the specific type and severity of the symptoms, the athlete may be told to rest for 24 hours and then resume activity at a level one step below where he or she was at when the symptoms returned.

Return to Play Protocol (Steps 1-4) Completed (Date/Signature): _____

Cleared for Return to Play (Step 5) by: _____ Date: _____

I accept responsibility for reporting all injuries and illnesses to my school and medical staff (athletic trainer/team physician) including any signs and symptoms of a CONCUSSION.

Signature of Student Athlete: _____ Date: _____

May be advanced back to competition after phone conversation with the healthcare professional that evaluated the athlete (MD/DO/PAC/LAT/ARNP/Neuropsychologist) and documented above.

This form is adapted from the Acute Concussion Evaluation (ACE) care plan on the CDC website (www.cdc.gov/injury). All medical providers are encouraged to review this site if they have questions regarding the latest information on the evaluation and care of the scholastic athlete following a concussion injury.



Heads Up to Schools: KNOW YOUR CONCUSSION ABCs

Assess
the
situation

Be alert for
signs and
symptoms

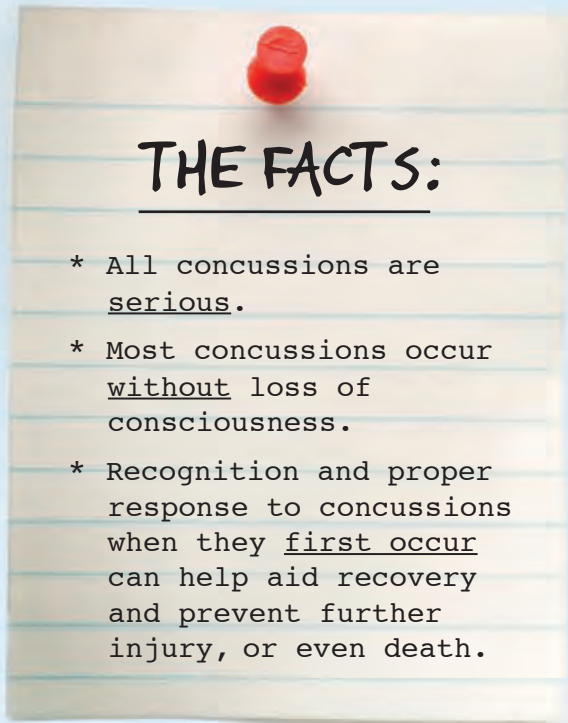
Contact a
health care
professional

A Fact Sheet for Teachers, Counselors, and School Professionals

What is a concussion?

A concussion is a type of brain injury that changes the way the brain normally works. A concussion is caused by a bump, blow, or jolt to the head. Concussions can also occur from a fall or blow to the body that causes the head and brain to move rapidly back and forth. Even what seems to be a mild bump to the head can be serious.

Children and adolescents are among those at greatest risk for concussion. The potential for a concussion is greatest during activities where collisions can occur, such as during physical education (PE) class, playground time, or school-based sports activities. However, concussions can happen any time a student's head comes into contact with a hard object, such as a floor, desk, or another student's head or body. Proper recognition and response to concussion can prevent further injury and help with recovery.



To download this fact sheet in Spanish, please visit: www.cdc.gov/Concussion.
Para obtener una copia electrónica de esta hoja de información en español, por favor visite: www.cdc.gov/Concussion.

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CENTERS FOR DISEASE CONTROL AND PREVENTION



What are the signs and symptoms of concussion?

The signs and symptoms of concussion can show up right after an injury or may not appear or be noticed until hours or days after the injury. Be alert for any of the following signs or symptoms. Also, watch for changes in how the student is acting or feeling, if symptoms are getting worse, or if the student just “doesn’t feel right.”



SIGNS OBSERVED BY TEACHERS AND SCHOOL PROFESSIONALS

- Appears dazed or stunned
- Is confused about events
- Answers questions slowly
- Repeats questions
- Can’t recall events *prior* to the hit, bump, or fall
- Can’t recall events *after* the hit, bump, or fall
- Loses consciousness (even briefly)
- Shows behavior or personality changes
- Forgets class schedule or assignments

SYMPTOMS REPORTED BY THE STUDENT

Thinking/Remembering:

- Difficulty thinking clearly
- Difficulty concentrating or remembering
- Feeling more slowed down
- Feeling sluggish, hazy, foggy, or groggy

Physical:

- Headache or “pressure” in head
- Nausea or vomiting
- Balance problems or dizziness
- Fatigue or feeling tired
- Blurry or double vision
- Sensitivity to light or noise
- Numbness or tingling
- Does not “feel right”

Emotional:

- Irritable
- Sad
- More emotional than usual
- Nervous

Sleep*:

- Drowsy
- Sleeps *less* than usual
- Sleeps *more* than usual
- Has trouble falling asleep

**Only ask about sleep symptoms if the injury occurred on a prior day.*

What are concussion danger signs?

Be alert for symptoms that worsen over time.

The student should be seen in an emergency department right away if s/he has:

- One pupil (the black part in the middle of the eye) larger than the other
- Drowsiness or cannot be awakened
- A headache that gets worse and does not go away
- Weakness, numbness, or decreased coordination
- Repeated vomiting or nausea
- Slurred speech
- Convulsions or seizures
- Difficulty recognizing people or places
- Increasing confusion, restlessness, or agitation
- Unusual behavior
- Loss of consciousness (even a brief loss of consciousness should be taken seriously)



Children and teens with a concussion should NEVER return to sports or recreation activities on the same day the injury occurred. They should delay returning to their activities until a health care professional experienced in evaluating for concussion says they are symptom-free and it's OK to return to play. This means, until permitted, not returning to:

- Physical Education (PE) class,
- Sports practices or games, or
- Physical activity at recess.

For more information and tool kits for youth sports coaches and high school coaches, visit www.cdc.gov/Concussion.

How can I recognize a concussion?

Teachers and school counselors may be the first to notice changes in their students. The signs and symptoms can take time to appear and can become evident during concentration and learning activities in the classroom.

Send a student to the school nurse, or another professional designated to address health issues, if you notice or suspect that a student has:

1. Any kind of forceful blow to the head or to the body that results in rapid movement of the head,
-and-
2. Any change in the student's behavior, thinking, or physical functioning. (See the signs and symptoms of concussion.)

What do I need to know about my students returning to school after a concussion?

Supporting a student recovering from a concussion requires a collaborative approach among school professionals, health care providers, and parents, as s/he may need accommodations during recovery. If symptoms persist, a 504 meeting may be called. Section 504 Plans are implemented when students have a disability (temporary or permanent) that affects their performance in any manner.



What to look for after a concussion

When students return to school after a concussion, school professionals should watch for:

- Increased problems paying attention or concentrating
- Increased problems remembering or learning new information
- Longer time needed to complete tasks or assignments
- Difficulty organizing tasks
- Inappropriate or impulsive behavior during class
- Greater irritability
- Less ability to cope with stress or more emotional



Students who return to school after a concussion may need to:

- Take rest breaks as needed,
- Spend fewer hours at school,
- Be given more time to take tests or complete assignments,
- Receive help with schoolwork, and/or
- Reduce time spent on the computer, reading, or writing.

Services and accommodations for students may include speech-language therapy, environmental adaptations, curriculum modifications, and behavioral strategies.

Students may need to limit activities while they are recovering from a concussion. Exercising or activities that involve a lot of concentration, such as studying, working on the computer, or playing video games, may cause concussion symptoms (such as headache or tiredness) to reappear or get worse.

It is normal for students to feel frustrated, sad, and even angry because they cannot return to recreation or sports right away, or cannot keep up with their schoolwork. A student may also feel isolated from peers and social networks. Talk with the student about these issues and offer support and encouragement. As the student's symptoms decrease, the extra help or support can be removed gradually.



*For more information on concussion and to order additional materials for school professionals **FREE- OF-CHARGE**, visit: www.cdc.gov/Concussion.



Heads Up to Schools: KNOW YOUR CONCUSSION ABCs

Assess the situation **B**e alert for signs and symptoms **C**ontact a health care professional

A Fact Sheet for School Nurses

What is a concussion?

A concussion is a type of brain injury that changes the way the brain normally works. A concussion is caused by a bump, blow, or jolt to the head. Concussions can also occur from a fall or blow to the body that causes the head and brain to move rapidly back and forth. Even what seems to be a mild bump to the head can be serious.

How can I recognize a concussion?

To help you recognize a concussion, ask the injured student or witnesses of the incident about:

1. Any kind of forceful blow to the head or to the body that resulted in rapid movement of the head.

-and-

2. Any change in the student's behavior, thinking, or physical functioning. (See the signs and symptoms of concussion.)

THE FACTS:

- * All concussions are serious.
- * Most concussions occur without loss of consciousness.
- * Recognition and proper response to concussions when they first occur can help aid recovery and prevent further injury, or even death.

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION



How can concussions happen in schools?

Children and adolescents are among those at greatest risk for concussion. Concussions can result from a fall, or any time a student's head comes into contact with a hard object, such as the floor, a desk, or another student's head or body. The potential for a concussion is greatest during activities where collisions can occur, such as during physical education (PE) class, playground time, or school-based sports activities.

Students may also get a concussion when doing activities outside of school, but then come to school when symptoms of the concussion are presenting. For example, adolescent drivers are at increased risk for concussion from motor vehicle crashes.

Concussions can have a more serious effect on a young, developing brain and need to be addressed correctly. Proper recognition and response to concussion symptoms in the school environment can prevent further injury and can help with recovery.



What are the signs and symptoms of concussion?

Students who experience **one or more** of the signs and symptoms listed below after a bump, blow, or jolt to the head or body should be referred to a health care professional experienced in evaluating for concussion.

There is no one single indicator for concussion. Rather, recognizing a concussion requires a symptom assessment. The signs and symptoms of concussion can take time to appear and can become more noticeable during concentration and learning activities in the classroom. For this reason, it is important to watch for changes in how the student is acting or feeling, if symptoms become worse, or if the student just “doesn't feel right.”

SIGNS OBSERVED BY SCHOOL NURSES

- Appears dazed or stunned
- Is confused about events
- Answers questions slowly
- Repeats questions
- Can't recall events *prior* to the hit, bump, or fall
- Can't recall events *after* the hit, bump, or fall
- Loses consciousness (even briefly)
- Shows behavior or personality changes

SYMPTOMS REPORTED BY THE STUDENT

Thinking/Remembering:

- Difficulty thinking clearly
- Difficulty concentrating or remembering
- Feeling more slowed down
- Feeling sluggish, hazy, foggy, or groggy

Emotional:

- Irritable
- Sad
- More emotional than usual
- Nervous

Physical:

- Headache or “pressure” in head
- Nausea or vomiting
- Balance problems or dizziness
- Fatigue or feeling tired
- Blurry or double vision
- Sensitivity to light or noise
- Numbness or tingling
- Does not “feel right”

Sleep*:

- Drowsy
- Sleeps *less* than usual
- Sleeps *more* than usual
- Has trouble falling asleep

**Only ask about sleep symptoms if the injury occurred on a prior day.*



Remember, you can't see a concussion and some students may not experience or report symptoms until hours or days after the injury. Most young people with a concussion will recover quickly and fully. But for some, concussion signs and symptoms can last for days, weeks, or longer.



What are concussion danger signs?

In rare cases, a dangerous blood clot may form on the brain in a person with a concussion and crowd the brain against the skull. The student should be taken to an emergency department right away if s/he exhibits any of the following danger signs after a bump, blow, or jolt to the head or body:

- One pupil larger than the other
- Is drowsy or cannot be awakened
- A headache that gets worse and does not go away
- Weakness, numbness, or decreased coordination

- Repeated vomiting or nausea
- Slurred speech
- Convulsions or seizures
- Cannot recognize people or places
- Becomes increasingly confused, restless, or agitated
- Has unusual behavior
- Loses consciousness (even a brief loss of consciousness should be taken seriously)

For more information and tool kits for youth sports coaches and high school coaches, visit www.cdc.gov/Concussion.

What can school nurses and school professionals do?

Below are steps for you to take when a student comes to your office after a bump, blow, or jolt to the head or body.

1. **Observe student for signs and symptoms of concussion for a minimum of 30 minutes.**
2. **Complete the *Concussion Signs and Symptoms Checklist* and monitor students consistently during the observation period.** The form includes an easy-to-use checklist of signs and symptoms that you can look for when the student first arrives at your office, fifteen minutes later, and at the end of 30 minutes, to determine whether any concussion symptoms appear or change.
3. **Notify the student's parent(s) or guardian(s) that their child had an injury to the head.**
 - > **If signs or symptoms are present:** refer the student right away to a health care professional with experience in evaluating for concussion. Send a copy of the *Concussion Signs and Symptoms Checklist* with the student for the health care professional to review. Students should follow their health care professional's guidance about when they can return to school and to physical activity.

- > **If signs or symptoms are not present:** the student may return to class, but should not return to sports or recreation activities on the day of the injury. Send a copy of the *Concussion Signs and Symptoms Checklist* with the student for their parent(s) or guardian(s) to review and ask them to continue to observe the student at home for any changes. Explain that signs and symptoms of concussion can take time to appear. Note that if signs or symptoms appear, the student should be seen right away by a health care professional with experience in evaluating for concussion.



Children and teens with a concussion should NEVER return to sports or recreation activities on the same day the injury occurred. They should delay returning to their activities until a health care professional experienced in evaluating for concussion says they are symptom-free and it's OK to return to play. This means, until permitted, not returning to:

- Physical Education (PE) class,
- Sports practices or games, or
- Physical activity at recess.



What do I need to know about students returning to school after a concussion?

Supporting a student recovering from a concussion requires a collaborative approach among school professionals, health care professionals, parents, and students. All school staff, such as teachers, school nurses, counselors, administrators, speech-language pathologists, coaches, and others should be informed about a returning student's injury and symptoms, as they can assist with the transition process and making accommodations for a student. If symptoms persist, a 504 meeting may be called. Section 504 Plans are implemented when students have a disability (temporary or permanent) that affects their performance in any manner. Services and accommodations for students may include speech-language therapy, environmental



School Policies:

Students Returning to School after a Concussion

Check with your school administrators to see if your district or school has a policy in place to help students recovering from a concussion succeed when they return to school. If not, consider working with your school administration to develop such a policy. Policy statements can include the district's or school's commitment to safety, a brief description of concussion, a plan to help students ease back into school life (learning, social activity, etc.), and information on when students can safely return to physical activity following a concussion.

adaptations, curriculum modifications, and behavioral strategies.

Encourage teachers and coaches to monitor students who return to school after a concussion. Students may need to limit activities while they are recovering from a concussion. Exercising or activities that involve a lot of concentration, such as studying, working on the computer, or playing video games, may cause concussion symptoms (such as headache or tiredness) to reappear or get worse. After a concussion, physical and cognitive activities—such as concentration and learning—should be carefully monitored and managed by health and school professionals.

If a student already had a medical condition at the time of the concussion (such as chronic headaches), it may take longer to

recover from the concussion. Anxiety and depression may also make it harder to adjust to the symptoms of a concussion.

School professionals should watch for students who show increased problems paying attention, problems remembering or learning new information, inappropriate or impulsive behavior during class, greater irritability, less ability to cope with stress, or difficulty organizing tasks. Students who return to school after a concussion may need to:

- Take rest breaks as needed,
- Spend fewer hours at school,
- Be given more time to take tests or complete assignments,
- Receive help with schoolwork, and/or
- Reduce time spent on the computer, reading, or writing.

It is normal for a student to feel frustrated, sad, and even angry because s/he cannot return to recreation or sports right away, or cannot keep up with schoolwork. A student may also feel isolated from peers and social networks. Talk with the student about these issues and offer support and encouragement. As the student's symptoms decrease, the extra help or support can be gradually removed.

What can I do to prevent and prepare for a concussion?

Here are some steps you can take to prevent concussions in school and ensure the best outcome for your students:

Prepare a concussion action plan. To ensure that concussions are identified early and managed correctly, have an action plan in place before the start of the school year. This plan can be included in your school or district's concussion policy. You can use the online action plan for sports and recreation activities at: www.cdc.gov/concussion/response/html. Be sure that other appropriate school and athletic staff know about the plan and have been trained to use it.

Educate parents, teachers, coaches, and students about concussion. Parents, teachers, and coaches know their students well and may be the first to notice when a student is not acting normally. Encourage teachers, coaches, and students to:

- Learn about the potential long-term effects of concussion and the dangers of returning to activity too soon.
- Look out for the signs and symptoms of concussion and send students to see you if they observe any or even suspect that a concussion has occurred.
- View videos about concussion online at: www.cdc.gov/Concussion.

Prevent long-term problems. A repeat concussion that occurs before the brain recovers from the previous concussion—usually within a short period of time (hours, days, or weeks)—can slow recovery or increase the likelihood of having long-term problems. In rare cases, repeat concussions

can result in edema (brain swelling), permanent brain damage, and even death. Keep students with a known or suspected concussion out of physical activity, sports, or playground activity on the day of the injury and until a health care professional with experience in evaluating for concussion says they are symptom-free and it is OK for the student to return to play.

Create safe school environments.

The best way to protect students from concussions is to prevent concussions from happening. Make sure your school has policies and procedures to ensure that the environment is a safe, healthy place for students. Talk to all school staff and administrators and encourage them to keep the physical space safe, keep stairs and hallways clear of clutter, secure rugs to the floor, and check the surfaces of all areas where students are physically active, such as playing fields and playgrounds. Playground surfaces should be made of shock-absorbing material, such as hardwood mulch or sand, and maintained to an appropriate depth. Proper supervision of students is also important.



For more detailed information about concussion diagnosis and management, please download *Heads Up: Facts for Physicians about Mild Traumatic Brain Injury* from CDC at: www.cdc.gov/Concussion.

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CENTERS FOR DISEASE CONTROL AND PREVENTION



Monitor the health of your student athletes.

Make sure to ask whether an athlete has ever had a concussion and insist that your athletes are medically

evaluated and are in good condition to participate in sports. Keep track of athletes who sustain concussions during the school year. This will help in monitoring injured athletes who participate in multiple sports throughout the school year.

Some schools conduct preseason baseline testing (also known as neurocognitive tests) to assess brain function—learning and memory skills, ability to pay attention or concentrate, and how quickly someone can think and solve problems. If an athlete has a concussion, these tests can be used again during the season to help identify the effects of the injury. Before the first practice, determine whether your school would consider baseline testing.

*Again, remember your
concussion ABCs:*

- A—Assess the situation
- B—Be alert for signs and symptoms
- C—Contact a health care professional

* For more information on concussion and to order additional materials for school professionals **FREE-OF-CHARGE**, visit: www.cdc.gov/Concussion.

PRE-PARTICIPATION PHYSICAL EVALUATION HISTORY FORM

(Note: This form is to be filled out by the patient and parent prior to seeing the physician. The physician should keep a copy of this form in the chart for their records).

Date of Exam:				
Name:			Date of Birth:	
Sex:	Age:	Grade:	School:	Sport(s):
Medicines and Allergies: Please list all of the prescription and over-the-counter medicines and supplements (herbal and nutritional) that you are currently taking:				
Do you have any allergies: Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, please identify specific allergy below:				
<input type="checkbox"/> Medicines:		<input type="checkbox"/> Pollens:		<input type="checkbox"/> Food:
				<input type="checkbox"/> Stinging Insects:

Explain "Yes" answers below. Circle questions you do not know the answer to.

GENERAL QUESTIONS	Yes	No
1. Has a doctor ever denied or restricted your participation in sports for any reason?		
2. Do you have any ongoing medical conditions? If so, please identify below: <input type="checkbox"/> Asthma <input type="checkbox"/> Anemia <input type="checkbox"/> Diabetes <input type="checkbox"/> Infections Other:		
3. Have you ever spent the night in the hospital?		
4. Have you ever had surgery?		
HEART HEALTH QUESTIONS ABOUT YOU	Yes	No
5. Have you ever passed out or nearly passed out DURING or AFTER exercise?		
6. Have you ever had discomfort, pain, tightness, or pressure in your chest during exercise?		
7. Does your heart ever race or skip beats (irregular beats) during exercise?		
8. Has a doctor ever told you that you have any heart problems? If so, check all that apply: <input type="checkbox"/> High blood pressure <input type="checkbox"/> A heart murmur <input type="checkbox"/> High cholesterol <input type="checkbox"/> A heart infection <input type="checkbox"/> Kawasaki disease <input type="checkbox"/> Other:		
9. Has a doctor ever ordered a test for your heart? (For example, ECG/EKG, echocardiogram)		
10. Do you get lightheaded or feel more short of breath than expected during exercise?		
11. Have you ever had an unexplained seizure?		
12. Do you get more tired or short of breath more quickly than your friends during exercise?		
HEART HEALTH QUESTIONS ABOUT YOUR FAMILY	Yes	No
13. Has any family member or relative died of heart problems or had an unexpected or unexplained sudden death before age 50 (including drowning, unexplained car accident, or sudden infant death syndrome)?		
14. Does anyone in your family have hypertrophic cardiomyopathy, Marfan syndrome, arrhythmogenic right ventricular cardiomyopathy, long QT syndrome, short QT syndrome, Brugada syndrome, or catecholaminergic polymorphic ventricular tachycardia?		
15. Does anyone in your family have a heart problem, pacemaker, or implanted defibrillator?		
16. Has anyone in your family had unexplained fainting, unexplained seizures, or near drowning?		
BONE AND JOINT QUESTIONS	Yes	No
17. Have you ever had an injury to a bone, muscle, ligament, or tendon that caused you to miss a practice or a game?		
18. Have you ever had any broken or fractured bones or dislocated joints?		
19. Have you ever had an injury that required x-rays, MRI, CT scan, injections, therapy, a brace, a cast, or crutches?		
20. Have you ever had a stress fracture?		
21. Have you ever been told that you have or have you had an x-ray for neck instability or atlantoaxial instability? (Down syndrome or dwarfism)		
22. Do you regularly use a brace, orthotics, or other assistive device?		
23. Do you have a bone, muscle, or joint injury that bothers you?		
24. Do any of your joints become painful, swollen, feel warm, or look red?		
25. Do you have any history of juvenile arthritis or connective tissue disease?		

MEDICAL QUESTIONS	Yes	No
26. Do you cough, wheeze, or have difficulty breathing during or after exercise?		
27. Have you ever used an inhaler or taken asthma medicine?		
28. Is there anyone in your family who has asthma?		
29. Were you born without or are you missing a kidney, an eye, a testicle (males) or spleen, or any other organ?		
30. Do you have groin pain or a painful bulge or hernia in the groin area?		
31. Have you had infectious mononucleosis (mono) within the last month?		
32. Do you have any rashes, pressure sores, or other skin problems?		
33. Have you had a herpes or MRSA skin infection?		
34. Have you ever had a head injury or concussion?		
35. Have you ever had a hit or blow to the head that caused confusion, prolonged headaches, or memory problems?		
36. Do you have a history of seizure disorder?		
37. Do you have headaches with exercise?		
38. Have you ever had numbness, tingling, or weakness in your arms or legs after being hit or falling?		
39. Have you ever been unable to move your arms or legs after being hit or falling?		
40. Have you ever become ill while exercising in the heat?		
41. Do you get frequent muscle cramps when exercising?		
42. Do you or someone in your family have sickle cell trait or disease?		
43. Have you had any problems with your eyes or vision?		
44. Have you had any eye injuries?		
45. Do you wear glasses or contact lenses?		
46. Do you wear protective eyewear, such as goggles or a face shield?		
47. Do you worry about your weight?		
48. Are you trying to or has anyone recommended that you gain or lose weight?		
49. Are you on a special diet or do you avoid certain types of foods?		
50. Have you ever had an eating disorder?		
51. Do you have any concerns that you would like to discuss with the doctor?		
FEMALES ONLY	Yes	No
52. Have you ever had a menstrual period?		
53. How old were you when you had your first menstrual period?		
54. How many periods have you had in the last 12 months?		
<p style="text-align: center;">Explain "Yes" answers here:</p>		

I hereby state that, to the best of my knowledge, my answers to the above questions are complete and correct.		
Signature of Athlete:	Signature of Parent(s) or Guardian:	Date:

PRE-PARTICIPATION PHYSICAL EVALUATION PHYSICAL EXAMINATION FORM

Name:	Date of Birth:
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Physician Reminders:

- Consider additional questions on more sensitive issues.
 - Do you feel stressed out or under a lot of pressure?
 - Do you ever feel sad, hopeless, depressed, or anxious?
 - Do you feel safe at your home or residence?
 - Have you ever tried cigarettes, chewing tobacco, snuff, or dip?
 - During the past 30 days, did you use chewing tobacco, snuff or dip?
 - Do you drink alcohol or use any other drugs?
 - Have you ever taken anabolic steroids or used any other performance supplements?
 - Have you ever taken any supplements to help you gain or lose weight or improve your performance?
 - Do you wear a seat belt, use a helmet, and use condoms?
- Consider reviewing questions on cardiovascular symptoms (Questions 5-14).

EXAMINATION

Height:	Weight:	<input type="checkbox"/> Male	<input type="checkbox"/> Female
BP: / (/)	Pulse:	Vision: R 20/ L 20/	Corrected: <input type="checkbox"/> Yes <input type="checkbox"/> No

MEDICAL	NORMAL	ABNORMAL FINDINGS
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Appearance <ul style="list-style-type: none"> Marfan stigmata (kyphoscoliosis, high-arched palate, pectus excavatum, arachnodactyly, arm span>height, hyperlaxity, myopia, MVP, aortic insufficiency) 		
Eyes/Ears/Nose/Throat <ul style="list-style-type: none"> Pupils equal Hearing 		
Lymph Nodes		
Heart* <ul style="list-style-type: none"> Murmurs (auscultation standing, supine, +/- Valsalva) Location of point of maximal pulse (PMI) 		
Pulses <ul style="list-style-type: none"> Simultaneous femoral and radial pulses 		
Lungs		
Abdomen		
Genitourinary (males only)**		
Skin <ul style="list-style-type: none"> HSV, lesions suggestive of MRSA, tinea corporis 		
Neurologic***		

MUSCULOSKELETAL	NORMAL	ABNORMAL FINDINGS
------------------------	---------------	--------------------------

Neck		
Back		
Shoulder/arm		
Elbow/forearm		
Hip/thigh		
Knee		
Leg/ankle		
Foot/toes		
Functional <ul style="list-style-type: none"> Duck-walk, single leg hop 		

* Consider ECG, echocardiogram, and referral to cardiology for abnormal cardiac history or exam; **Consider GU exam if in private setting. Having third party present is recommended.
 ***Consider cognitive evaluation or baseline neuropsychiatric testing if a history of significant concussion.

Cleared for all sports without restriction.

Cleared for all sports without restriction **with recommendations for further evaluation or treatment for:**

Not Cleared

- Pending further evaluation
- For any sports
- For certain sports (please list):
Reason:

Recommendations:

I have examined the above-named student and completed the pre-participation physical evaluation. The athlete does not present apparent clinical contraindications to practice and participate in the sport(s) as outlined above. A copy of the physical exam is on record in my office and can be made available to the school at the request of the parents. If conditions arise after the athlete has been cleared for participation, the physician may rescind the clearance until the problem is resolved and the potential consequences are completely explained to the athlete (and parents/guardians).

Name of Physician (type/print):	Date:
Address:	Phone:
Signature of Physician (MD/DO/ARNP/PA/Chiropractor):	

PRE-PARTICIPATION PHYSICAL EVALUATION

Missouri State High School Activity Association (MSHSAA) Eligibility and Authorization Statement

STUDENT AGREEMENT (Regarding Conditions for Participation)

This application to represent my school in interscholastic athletics is entirely voluntary on my part and is made with the understanding that I have studied and understand the eligibility standards that I must meet to represent my school and that I have not violated any of them.

I have read, understand, and acknowledge receipt of the MSHSAA brochure entitled "How to Maintain and Protect Your High School Eligibility," which contains a summary of the eligibility rules of the MSHSAA. (I understand that a copy of the *MSHSAA Handbook* is on file with the principal and athletic administrator and that I may review it in its entirety, if I so choose. All MSHSAA by-laws and regulations from the *Handbook* are also posted on the MSHSAA website at www.mshsaa.org).

I understand that a MSHSAA member school must adhere to all rules and regulations that pertain to school-sponsored, interscholastic athletics programs, and I acknowledge that local rules may be more stringent than MSHSAA rules.

I also understand that if I do not meet the citizenship standards set by the school or if I am ejected from an interscholastic contest because of an unsportsmanlike act, it could result in me not being allowed to participate in the next contest or suspension from the team either temporarily or permanently.

I understand that if I drop a class, take course work through Post -Secondary Enrollment Option, Credit Flexibility, or other educational options, this action could affect compliance with MSHSAA economic standards and my eligibility.

I understand that participation in interscholastic athletics is a privilege and not a right. As a student athlete, I understand and accept the following responsibilities:

- I will respect the rights and beliefs of others and will treat others with courtesy and consideration.
- I will be fully responsible for my own actions and the consequences of my actions.
- I will respect the property of others.
- I will respect and obey the rules of my school and laws of my community, state, and country.
- I will show respect to those who are responsible for enforcing the rules of my school and the laws of my community, state, and country.

I have completed and/or verified that part of this certificate which requires me to list all previous injuries or additional conditions that are known to me which may affect my performance in so representing my school, and I verify that it is correct and complete.

Signature of Athlete:

Date:

PARENT PERMISSION (Authorization for Treatment, Release of Medical Information, and Insurance Information)

Informed Consent: By its nature, participation in interscholastic athletics includes risk of serious bodily injury and transmission of infectious disease such as HIV and Hepatitis B. Although serious injuries are not common and the risk of HIV transmission is almost nonexistent in supervised school athletic programs, it is impossible to eliminate all risk. Participants must obey all safety rules, report all physical and hygiene problems to their coaches, follow a proper conditioning program, and inspect their own equipment daily. **PARENTS, GUARDIANS, OR STUDENTS WHO MAY NOT WISH TO ACCEPT RISK DESCRIBED IN THIS WARNING SHOULD NOT SIGN THIS FORM. STUDENTS MAY NOT PARTICIPATE IN MSHSAA- SPONSORED SPORT WITHOUT THE STUDENT'S AND PARENT'S/GUARDIAN/S SIGNATURE.**

I understand that in the case of injury or illness requiring transportation to a health care facility, a reasonable attempt will be made to contact the parent or guardian in the case of the student-athlete being a minor, but that, if necessary, the student-athlete will be transported via ambulance to the nearest hospital.

We hereby give our consent for the above student to represent his/her school in interscholastic athletics. We also give our consent for him/her to accompany the team on trips and will not hold the school responsible in case of accident or injury whether it be en route to or from another school or during practice or an interscholastic contest; and we hereby agree to hold the school district of which this school is a part and the MSHSAA, their employees, agents, representatives, coaches, and volunteers harmless from any and all liability, actions, causes of action, debts, claims, or demands of every kind and nature whatsoever which may arise by or in connection with participation by my child/ward in any activities related to the interscholastic program of his/her school.

If we cannot be reached and in the event of an emergency, we also give our consent for the school to obtain through a physician or hospital of its choice, such medical care as is reasonably necessary for the welfare of the student, if he/she is injured in the course of school athletic activities. We authorize the release of necessary medical information to the physician, athletic trainer, and/or school personnel related to such treatment/care. We understand that the school may not provide transportation to all events, and permit / do not permit (CIRCLE ONE) my child to drive his/her vehicle in such a case.

To enable the MSHSAA to determine whether the herein named student is eligible to participate in interscholastic athletics in the MSHSAA member school, I consent to the release of the MSHSAA any and all portions of school record files, beginning with seventh grade, of the herein named student, specifically including, without limiting the generality of the foregoing, birth and age records, name and residence address of parent(s) or guardian(s), residence address of the student, academic work completed, grades received, and attendance data.

We confirm that this application for the above student to represent his/her school in interscholastic athletics is made with the understanding that we have studied and understand the eligibility standards that our son/daughter must meet to represent his/her school and that he/she has not violated any of them. We also understand that if our son/daughter does not meet the citizenship standards set by the school or if he/she is ejected from an interscholastic contest because of an unsportsmanlike act, it could result in him/her not being allowed to participate in the next contest or suspension from the team either temporarily or permanently.

I consent to the MSHSAA's use of the herein named student's name, likeness, and athletic-related information in reports of contests, promotional literature of the Association and other materials and releases related to interscholastic athletics.

We further state that we have completed that part of this certificate which requires us to list all previous injuries or additional conditions that are known to us which may affect this athlete's performance or treatment and we certify that it is correct and complete.

The MSHSAA By-Laws provide that a student shall not be permitted to practice or compete for a school until it has verification that he/she has basic health/accident insurance coverage, which includes athletics. Our son/daughter is covered by basic health/accident insurance for the current school year as indicated below:

Name of Insurance Company:	Policy Number:
Signature of Parent(s) or Guardian:	Date:

PARENT AND STUDENT SIGNATURE (Concussion Materials)

We have received and read the MSHSAA materials on Concussion, which includes information on the definition of a concussion, symptoms of a concussion, what to do if you have a concussion, and how to prevent a concussion.

Signature of Athlete:	Date:
Signature of Parent(s) or Guardian:	Date:

EMERGENCY CONTACT INFORMATION

Parent(s) or Guardian	Address	Phone Number
Name of Contact	Relationship to Athlete	Phone Number
Name of Contact	Relationship to Athlete	Phone Number

APPENDIX C

From: MSHSAA Broadcast
Sent: Thursday, May 11, 2017 10:09 AM
To: ALL
Subject: MSHSAA Head Injury Survey - 2016-2017 School Year

TO: Athletic Directors, District Athletic Directors, Athletic Trainers, School Nurses
MSHSAA Member High Schools and Junior High Schools
FROM: Greg Stahl, Assistant Executive Director
Missouri State High School Activities Association
SUBJECT: MSHSAA Head Injury Survey – 2016-2017 SCHOOL YEAR
DATE: May 10, 2017

This email is to advise you that it is now time for us to collect information on head injuries that occurred in your school district during the 2016-17 school year for fulfilling and being in compliance with **House Bill 300 (Brain Injury Prevention Act)**. This information is used to produce a report that is made available to all schools, parents, and the public. We are collecting this information now while it is still available with the current school administration, athletic trainers or school nurses, whichever personnel your school district uses to track head injuries during the school year.

Before you proceed to complete the MSHSAA Head Injury Survey, as directed below, please be advised that the “Administrators” link located on your school’s home page of the MSHSAA website under Account Information now permits you to add the “user roles” of Athletic Trainer and School Nurse. These roles were created for the specific purpose of allowing these two user roles to assist with the completion of the MSHSAA Head Injury Survey “if” a school district uses an Athletic Trainer or School Nurse to track head injuries throughout the school year. If you want your Athletic Trainer or School Nurse to have login access to complete the MSHSAA Head Injury Survey, please add them to your “Administrators” page under you school’s Account Information.

Select the link below to access the **2016-2017 MSHSAA Head Injury Survey** that needs to be completed by the school’s Athletic Director, Athletic Trainer or School Nurse, dependent on the personnel in your district who is responsible for the tracking of head injuries during the school year. Regardless of who completes the survey, please make sure to involve your school nurse and/or athletic trainer so that we may have the most accurate information possible to include in this report.

<http://intranet.mshsaa.org/Home/HeadInjurySurvey.aspx>

The 2016-2017 MSHSAA Head Injury Survey must be completed by June 30, 2017.

Thanking you in advance,

Greg Stahl
Assistant Executive Director
Missouri State High School Activities Association
1 N. Keene St.
Columbia, Mo. 65201
573-875-4880
greg@mshsaa.org



- 1 Does your school district have an emergency action plan in place at all home contest sites?
 Yes
 No
- 2 Does your school district have an emergency action plan in place for each sport/activity and sport/activity venue that it uses? (i.e. The Gym, baseball field, tennis courts ect.)
 Yes
 No
- 3 Does your school district use the services of an athletic trainer or other medical support throughout the year? (Practices - Contests)
 No
 Yes Full time at the school for both practices and contests. (All levels)
 Yes Part-time, check-up on injuries and covering the contests. (All levels)
 Yes Part-time covering contests only. (All levels)
 Yes Part-time covering most of the varsity contests but not all.
- 4 Does your school district have an ambulance at all athletic contests?
 Yes
 No
- 5 If your school plays football, do you have an ambulance at the contests?
 Yes at the varsity games only.
 Yes, at all of the contests, Freshman, JV, and Varsity
 No, we do not have an ambulance at the contests.
 N/A, we do not play football.
- 6 Did your school district use the NFHS video "Concussion in Sports-What you Need to Know," to educate your coaching staff for the 2016-2017 school year?
 Yes
 No



[**Continue to Step 3**](#)



Head Injury Survey



Step 1 (School)



Step 2 (Questions)



Step 3 (Sport related injury)



Step 4 (Non-sport related injury)



Head Injuries Occurring During a Sport or Activity

For each sport or activity, please indicate the number of student athletes who were removed from a sport or activity and could not participate without a medical return to play form while participating in the sport or activity. Also, indicate how many of the medical return to play forms indicated that a concussion had occurred and the return to play protocol was put in place. List the total number of days that were missed by those students in that particular sport or activity and the total number of days of classroom attendance that were missed. **If there were no head injuries in a particular sport or activity, there is no need to list it with zeros.**



This school had no head injuries occur during a sport or activity that required a Medical Return to Play Form.

Level: High School Jr. High

Activity/Sport:

Select a sport or activity

Number of Students removed from sport or activity and had to obtain a medical return to play form:

Number of Students with a diagnosed concussion:

Total number of days missed for this sport or activity:

Total number of classroom days missed:

Add Record



Head Injury Survey



Step 1 (School)



Step 2 (Questions)



Step 3 (Sport related injury)



Step 4 (Non-sport related injury)



Head Injuries Occurring **Outside** of a Sport or Activity

Please indicate the number of students that were not allowed to participate in a sport without a Medical Return to Play Form from a head injury that occurred **outside** of the sport or activity (car accident, incident at home, etc.). These individuals should not have been included in the previous question unless a second head injury had occurred outside of the sport or activity that they participated in.



This school had no head injuries occur outside a sport or activity that required a Medical Return to Play Form.

Level:



High School



Jr. High

Activity/Sport:

Select a sport or activity



Number of Students removed from sport or activity and had to obtain a medical return to play form:

Number of Students with a diagnosed concussion:

Total number of days missed for this sport or activity:

Total number of classroom days missed:



[Add Record](#)



Head Injury Survey



Step 1 (School)



Step 2 (Questions)



Step 3 (Sport related injury)



Step 4 (Non-sport related injury)



If you have documentation that can be sent to our office without names attached, please use the file upload tool below to attach it to this survey. If electronic files cannot be uploaded, please email documentation to headinjury@mshsaa.org or fax it to (573) 875-1450.



Upload



I do not have any documentation, Continue to Step 6

APPENDIX D



2265 Schuetz Road | St. Louis, MO 63146-3409
Phone: (314) 426-4024 | Toll Free Phone: (800) 444-6443
Fax: (314) 426-3290
www.biamo.org | info@biamo.org

| 30 YEARS OF HELP AND HOPE

2018 Brain Injury Association of Missouri Sports Concussions: Facts, Fallacies and New Frontiers

Topics and Potential Timeline

7:30 am – 7:50 am	Registration
7:50 am – 8:00 am	Welcome
8:00 am – 8:30 am	Concussion Facts and Fallacies
8:35 am – 9:00 am	New Frontiers in Research
9:00 am – 9:15 am	Break
9:15 am – 10:00 am	Importance of Recognition of Potential Concussion (Panel Discussion)
10:05 am – 10:35 am	Trends in Assessment and Screening of Concussions
10:35 am – 10:45 am	Break
10:45 am – 11:45 am	Changing Your Concussion Culture (Keynote Presentation)
11:45 am – 12:15 pm	Lunch (No presentation, visit with exhibitors)
12:15 pm – 12:45 pm	Athlete Perspective
12:45 pm – 1:00 pm	Closing Remarks

