

Introduction:

With the rise of overuse injuries and burnout among young athletes that tend to cause a lifetime of chronic injuries and related health problems, early sport specialization has become one of the most serious issue related to health and safety in all of youth sports. In early 2016, the Michigan High School Athletic Association appointed the Task Force on Multi-Sport Participation as part of continued efforts to promote and protect participant health and work to address the issues leading to early sport specialization.

The MHSAA Task Force on Multi-Sport Participation has undertaken the initiative of measuring multi-sport participation in MHSAA member schools for the dual purposes of identifying significant broad themes and recognizing "achievers" – that is, schools that surpass the norm given their enrollment, location and other factors that affect school sports participation. Identifying schools with high levels of multi-sport participation, as well as trends, and questions that might be researched will help point school-sponsored sports leadership toward policies, procedures, and programming that will tend to increase multi-sport participation and improve the experience of students in interscholastic athletic programs of Michigan and beyond.

The Spring of 2019 marked the second year of data collection on multi-sport participation among athletes at MHSAA member schools. As done previously, all 747 MHSAA member schools were surveyed regarding multi-sport participation among their athletes – schools were simply asked to identify the total number of individuals that were members of athletic teams in MSHAA sponsored sports and the number of those athletes who participated in more than one MHSAA sponsored sport. The 2018-19 survey also asked specifically how many sports each athlete played. This summary is based on usable data from the 632 schools responding to the survey.

Observations:

- Overall response rate was 82.9% (Table 1). This is slightly higher than 79.9% response rate for 2017-2018.
 - 82.9% of all Class A schools responded to the survey, which was the highest response rate among all classes, just as in in the first year (2017-18 82.8%). Similarly, the lowest response rate again was Class D at 76.5 % (2017-18 76.7%). Prior to the first year of data collection, there was an expectation that Class A schools would have the lowest response rate given how difficult it could be for schools with large enrollment and large athletic programs to track and subsequently submit the data for this survey. This continues not to be the case. In fact, Class D schools, which presumably would have had an easier time tracking the multi-sport participation data because of they have fewer students involved in their programs, had the lowest response rate in both years of data collection. The difference in response rate does not appear to be significant, but may be related to the differences between personnel and resources among large and small schools.

- Just as in the first year of data, smaller schools tend to have a higher percentage of their students participating in athletics. This tendency not only holds across classes (Table 2), but also across different enrollments within Class A (Table 5).
- Similarly, smaller schools tend to have a higher percentage of athletes participating on multiple sports teams. This tendency not only holds across classes (Table 3), but also across different enrollments within Class A (Table 6). In fact, there is a nearly 20 percentage point difference in the of multi-sport athletes between Class A schools with fewer than 1,000 students and Class A schools with over 2,000 students. This is the same as the previous year of data collection.
- The percentage of athletes participating in multiple sports is higher among boys than girls this holds across all classes (Table 3) and different enrollments within Class A (Table 6) the only exception is Class D, which shows a nearly equal proportion of athletes at these schools are multi-sport athletes (Table 3). Again, this is the same as the 2017-18 data.
- Table 4 shows how many sports athletes participated in during the 2018-2019 school year. These data support the tendencies described above. Schools with larger enrollments tend to have a higher percentage of single sport athletes, and the percentage of single sport athletes is higher among girls than boys.
- The percentage of 2 sport athletes is somewhat similar among all classes approximately one-third (between 30% and 37.5%) of athletes participate in two sports (Table 4).
- There is a significant difference in the percentage of 3 sport athletes between classes schools with lower enrollments have a much higher percentage of athletes participating in 3 sports (Table 4).
- Schools in the top 10% with regard to multi-sport participation for both the 2017-18 and 2018-19 school year:

Class A – Marquette, Battle Creek Harper Creek, and New Baltimore Anchor Bay

Class B – Gladstone and Warren Lincoln

Class C – Saginaw Michigan Lutheran Seminary

Class D – Brimley, Kinross Maplewood Baptist, Portland St Patrick, Athens, and Jackson Christian

Survey Data:

Table 1. Multi-Sport Participation Survey Reponses by Class

	Class A	Class B	Class C	Class D	Combined
Number of schools surveyed	186	188	186	187	747
Number of responding schools*	166	153	157	143	619
Response rate (# surveyed / # responding)	89.2%	81.4%	84.4%	76.5%	82.9%

^{*}The term "responding schools" refers to schools submitting surveys with usable data – 647 schools submitted responses, but data from 28 schools that was clearly inaccurate based on the size of the school was excluded from analysis, as it would have skewed the data. From this point forward, in order to avoid needless repetition, "responding schools" will just be referred to as "schools".

Table 2. Sport Participation among General Student Population by Class and Gender – (%) of Student Enrollment (Total # Athletes / Total # Students Enrolled)

		Class A		Class B				Class C			Class D		Class	ses Combi	ned
Gender	Total Athletes	Student Enrollment	%												
Boys	52,257	121,488	43.0%	22,605	46,214	48.9%	12,461	23,131	53.9%	4,739	8,110	58.4%	92,062	198,943	46.3%
Girls	42,151	117,941	35.7%	19,045	44,637	42.7%	10,383	21,912	47.4%	4,237	7,621	55.6%	75,816	192,111	39.5%
Combined	94,408	239,429	39.4%	41,650	90,851	45.8%	22,844	45,043	50.7%	8,976	15,731	57.1%	167,878	391,054	42.9%

Table 3. Multi-Sport Participation among Athlete Population by Class and Gender - (%) of Athlete Population (# of Multi-Sport Athletes / Total # Athletes)

		Class A			Class B			Class C			Class D		Clas	ses Comb	ined
Gender	# Multi- Sport Athletes	Total Athletes	%												
Boys	19,654	52,257	37.6%	11,568	22,605	51.2%	7,420	12,461	59.5%	2,909	4,739	61.4%	41,551	92,062	45.1%
Girls	13,753	42,151	32.6%	8,726	19,045	45.8%	5,537	10,383	53.3%	2,641	4,237	62.3%	30,657	75,816	40.4%
Combined	33,407	94,408	35.4%	20,294	41,650	48.7%	12,957	22,844	56.7%	5,550	8,976	61.8%	72,208	167,878	43.0%

Table 4. Number of Sports Played among Athlete Population by Class and Gender - (%) of Athlete Population (# of athletes participating in that number of sports / total # of athletes)

Class A												
Gender	Total Athletes	Single Sport	%	2 Sports	%	3 Sports	%	4 or More Sports	%	TOTAL Multi-sport Athletes	%	
Boys	52,257	32,603	62.4%	16,049	30.7%	3,508	6.7%	97	0.2%	19,654	37.6%	
Girls	42,151	28,398	67.4%	11,501	27.3%	2,166	5.1%	86	0.2%	13,753	32.6%	
Combined	94,408	61,001	64.6%	27,550	29.2%	5,674	6.0%	183	0.2%	33,407	35.4%	
				(Class B							
Gender	Total Athletes	Single Sport	%	2 Sports	%	3 Sports	%	4 or More Sports	%	TOTAL Multi-sport Athletes	%	
Boys	22,605	11,037	48.8%	8,371	37.0%	3,058	13.5%	139	0.6%	11,568	51.2%	
Girls	19,045	10,319	54.2%	6,502	34.1%	2,126	11.2%	98	0.5%	8,726	45.8%	
Combined	41,650	21,356	51.3%	14,873	35.7%	5,184	12.4%	237	0.6%	20,294	48.7%	
	-			(Class C	-			•		_	
Gender	Total Athletes	Single Sport	%	2 Sports	%	3 Sports	%	4 or More Sports	%	TOTAL Multi-sport Athletes	%	
Boys	12,461	5,041	40.5%	4,769	38.3%	2,498	20.0%	153	1.2%	7,420	59.5%	
Girls	10,383	4,846	46.7%	3,723	35.9%	1,662	16.0%	152	1.5%	5,537	53.3%	
Combined	22,844	9,887	43.3%	8,492	37.2%	4,160	18.2%	305	1.3%	12,957	56.7%	
	-		-	(Class D		-		-			
Gender	Total Athletes	Single Sport	%	2 Sports	%	3 Sports	%	4 or More Sports	%	TOTAL Multi-sport Athletes	%	
Boys	4,739	1,830	38.6%	1,683	35.5%	1,046	22.1%	180	3.8%	2,909	61.4%	
Girls	4,237	1,596	37.7%	1,509	35.6%	970	22.9%	162	3.8%	2,641	62.3%	
Combined	8,976	3,426	38.2%	3,192	35.6%	2,016	22.5%	342	3.8%	5,550	61.8%	
				Classe	es Comb	ined						
Gender	Total Athletes	Single Sport	%	2 Sports	%	3 Sports	%	4 or More Sports	%	TOTAL Multi-sport Athletes	%	
Boys	92,062	50,511	54.9%	30,872	33.5%	10,110	11.0%	569	0.6%	41,551	45.1%	
Girls	75,816	45,159	59.6%	23,235	30.6%	6,924	9.1%	498	0.7%	30,657	40.4%	
Combined	167,878	95,670	57.0%	54,107	32.2%	17,034	10.1%	1,067	0.6%	72,208	43.0%	

Table 5. Sport Participation among General Student Population at Class A Schools by Enrollment and Gender – (%) of Student Enrollment (Total # Athletes / Total # Students Enrolled)

	Enrollm	ent less th	an 1,000	Enrollment 1,000-1,500			Enrollment 1,501-2,000					2,000	All Class A Combined		bined
Gender	Total Athletes	Student Enrollment	%	Total Athletes	Student Enrollment	%	Total Athletes	Student Enrollment	%	Total Athletes	Student Enrollment	%	Total Athletes	Student Enrollment	%
Boys	7,409	14,259	52.0%	19,317	44,561	43.3%	13,243	32,006	41.4%	12,288	30,662	40.1%	52,257	121,488	43.0%
Girls	5,623	13,620	41.3%	15,533	43,074	36.1%	10,638	31,121	34.2%	10,357	30,126	34.4%	42,151	117,941	35.7%
Combined	13,032	27,879	46.7%	34,850	87,635	39.8%	23,881	63,127	37.8%	22,645	60,788	37.3%	94,408	239,429	39.4%

Table 6. Multi-Sport Participation among Athlete Population at Class A Schools by Class and Gender – (%) of Athlete Population (# of Multi-Sport Athletes / Total # Athletes)

	Enrollme	ent less th	nan 1,000	Enrollment 1,000-1,500			Enrollment 1,501-2,000			Enrollr	nent over	2,000	All Class A Combined		
Gender	# Multi- Sport Athletes	Total Athletes	%	# Multi- Sport Athletes	Total Athletes	%	# Multi- Sport Athletes	Total Athletes	%	# Multi- Sport Athletes	Total Athletes	%	# Multi- Sport Athletes	Student Enrollment	%
Boys	3,600	7,409	48.6%	7,667	19,317	39.7%	4,854	13,243	36.7%	3,533	12,288	28.8%	19,654	52,257	37.6%
Girls	2,277	5,623	40.5%	5,323	15,533	34.3%	3,558	10,638	33.4%	2,595	10,357	25.1%	13,753	42,151	32.6%
Combined	5,877	13,032	45.1%	12,990	34,850	37.3%	8,412	23,881	35.2%	6,128	22,645	27.1%	33,407	94,408	35.4%

Table 7. Top 10% of Class A Schools with Regard to Multi-Sport Participation (Ranked by % of Multi-Sport Athlete Population – Boys and Girls Data Combined)

Rank	School	Total Boy Athletes	# Boy Multi-Sport Athletes	% Multi- Sport Boy Athletes	Total Girl Athletes	# Girl Multi- Sport Athletes	% Multi- Sport Girl Athletes	Total Athletes	Total Multi- Sport Athletes	% Multi- Sport Athletes
1	Marquette	288	252	87.5%	237	199	84.0%	525	451	85.9%
2	Grand Rapids Northview	305	252	82.6%	293	245	83.6%	598	497	83.1%
3	Orchard Lake St Mary's	306	231	75.5%	0	0	0.0%	306	231	75.5%
4	Detroit East English	305	215	70.5%	175	140	80.0%	480	355	74.0%
5	Gibraltar Carlson	231	178	77.1%	225	147	65.3%	456	325	71.3%
6	Greenville	269	176	65.4%	227	150	66.1%	496	326	65.7%
7	Battle Creek Harper Creek	220	145	65.9%	155	95	61.3%	375	240	64.0%
8	Livonia Franklin	231	140	60.6%	221	147	66.5%	452	287	63.5%
9	Parma Western	135	93	68.9%	103	56	54.4%	238	149	62.6%
10	Brownstown Woodhaven	437	265	60.6%	375	239	63.7%	812	504	62.1%
11	Taylor	140	62	44.3%	232	167	72.0%	372	229	61.6%
12	Lansing Everett	170	100	58.8%	160	100	62.5%	330	200	60.6%
13	Hamtramck	121	65	53.7%	60	43	71.7%	181	108	59.7%
14	Livonia Stevenson	538	353	65.6%	409	212	51.8%	947	565	59.7%
15	New Baltimore Anchor Bay	440	261	59.3%	453	266	58.7%	893	527	59.0%
16	Port Huron Northern	307	181	59.0%	226	129	57.1%	533	310	58.2%

Table 8. Top 10% of Class B Schools with Regard to Multi-Sport Participation (Ranked by % of Multi-Sport Athlete Population – Boys and Girls Data Combined)

Rank	School	Total Boy Athletes	# Boy Multi- Sport Athletes	% Multi- Sport Boy Athletes	Total Girl Athletes	# Girl Multi-Sport Athletes	% Multi- Sport Girl Athletes	Total Athletes	Total Multi-Sport Athletes	% Multi- Sport Athletes
1	Coloma	81	71	87.7%	68	59	86.8%	149	130	87.2%
2	Gladstone	87	76	87.4%	116	100	86.2%	203	176	86.7%
3	Flat Rock	198	162	81.8%	160	136	85.0%	358	298	83.2%
4	Dundee	130	98	75.4%	122	104	85.2%	252	202	80.2%
5	Detroit Osborn	82	80	97.6%	106	70	66.0%	188	150	79.8%
6	Ovid-Elsie	77	62	80.5%	63	48	76.2%	140	110	78.6%
7	Montague	119	94	79.0%	106	79	74.5%	225	173	76.9%
8	Detroit Cody	108	93	86.1%	70	40	57.1%	178	133	74.7%
9	Detroit Henry Ford	60	44	73.3%	41	31	75.6%	101	75	74.3%
10	Edwardsburg	109	89	81.7%	110	73	66.4%	219	162	74.0%
11	Warren Lincoln	77	53	68.8%	48	34	70.8%	125	87	69.6%
12	Otisville LakeVille Memorial	107	75	70.1%	83	57	68.7%	190	132	69.5%
13	Bay City John Glenn	161	119	73.9%	165	105	63.6%	326	224	68.7%
14	Detroit Collegiate Prep	28	19	67.9%	35	24	68.6%	63	43	68.3%
15	Imlay City	157	102	65.0%	146	99	67.8%	303	201	66.3%

Table 9. Top 10% of Class C Schools with Regard to Multi-Sport Participation (Ranked by % of Multi-Sport Athlete Population – Boys and Girls Data Combined)

Rank	School	Total Boy Athletes	# Boy Multi-Sport Athletes	% Multi- Sport Boy Athletes	Total Girl Athletes	# Girl Multi- Sport Athletes	% Multi- Sport Girl Athletes	Total Athletes	Total Multi- Sport Athletes	% Multi- Sport Athletes
1	Schoolcraft	120	115	95.8%	90	68	75.6%	210	183	87.1%
2	Mayville	46	42	91.3%	48	39	81.3%	94	81	86.2%
3	Manton	105	90	85.7%	65	55	84.6%	170	145	85.3%
4	Houghton Lake	62	50	80.6%	77	68	88.3%	139	118	84.9%
5	Cass City	90	76	84.4%	80	68	85.0%	170	144	84.7%
6	Decatur	54	46	85.2%	37	30	81.1%	91	76	83.5%
7	Flint Beecher	60	52	86.7%	51	36	70.6%	111	88	79.3%
8	Mesick	42	27	64.3%	34	33	97.1%	76	60	78.9%
9	Detroit Douglass	45	35	77.8%	0	0	0.0%	45	35	77.8%
10	Saginaw Michigan Lutheran Seminary	85	72	84.7%	67	46	68.7%	152	118	77.6%
11	Galesburg-Augusta	91	72	79.1%	87	63	72.4%	178	135	75.8%
12	Homer	66	48	72.7%	70	54	77.1%	136	102	75.0%
13	Breckenridge	87	63	72.4%	47	37	78.7%	134	100	74.6%
14	Addison	66	52	78.8%	77	54	70.1%	143	106	74.1%
15	Detroit Leadership Academy	47	37	78.7%	30	20	66.7%	77	57	74.0%

Table 10. Top 10% of Class D Schools with Regard to Multi-Sport Participation (Ranked by % of Multi-Sport Athlete Population – Boys and Girls Data Combined)

Rank	School	Total Boy Athletes	# Boy Multi- Sport Athletes	% Multi- Sport Boy Athletes	Total Girl Athletes	# Girl Multi- Sport Athletes	% Multi- Sport Girl Athletes	Total Athletes	Total Multi- Sport Athletes	% Multi- Sport Athletes
1	Gaylord St Mary	39	39	100.0%	34	29	85.3%	73	68	93.2%
2	Waterford Our Lady of the Lakes	24	22	91.7%	35	32	91.4%	59	54	91.5%
3	Watersmeet	14	13	92.9%	17	15	88.2%	31	28	90.3%
4	Mackinaw City	11	11	100.0%	17	14	82.4%	28	25	89.3%
5	Painesdale Jeffers	50	45	90.0%	41	34	82.9%	91	79	86.8%
6	Brimley	74	62	83.8%	57	50	87.7%	131	112	85.5%
7	Kinross Maplewood Baptist	7	5	71.4%	12	11	91.7%	19	16	84.2%
8	North Adams-Jerome	12	9	75.0%	12	11	91.7%	24	20	83.3%
9	Powers North Central	54	46	85.2%	47	38	80.9%	101	84	83.2%
10	Lawrence	45	40	88.9%	44	34	77.3%	89	74	83.1%
11	Portland St Patrick	37	30	81.1%	47	39	83.0%	84	69	82.1%
12	Athens	65	55	84.6%	45	35	77.8%	110	90	81.8%
13	Jackson Christian	25	19	76.0%	28	24	85.7%	53	43	81.1%
14	Lake Leelanau St Mary	21	17	81.0%	26	21	80.8%	47	38	80.9%