

Connecticut State Department of Education

**Health Services Program
Information Survey Report
Concussion Analysis**

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Developed for:

The Connecticut State Department of Education

By

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For the 157 school districts that completed the concussion questions in 2018-2019, there were 5,177 diagnosed concussions, a 17.6% decrease from the previous year (6,279 diagnosed concussions, 170 school districts reporting). As in the previous year, the greatest number of concussions occurred during “Interscholastic Athletic Activities” followed by “Outside of School” and “Non-School Sports Related” activities. As a result of the diagnosed concussions reported, there were 9,514 accommodations reported by school districts. The majority of students with reported diagnosed concussions (76.5%) missed less than five school days because of the concussion while a small percentage (less than 1%) missed more than 20 school days.

A. Concussions by Gender

The number of diagnosed concussions among FEMALE and MALE students during the 2018-2019 school year:

Grade	Diagnosed Concussions FEMALES		Diagnosed Concussions MALES		Total	
	2017-2018	2018-2019	2017-2018	2018-2019	2017-2018	2018-2019
Pre-K	3	6	4	6	7	12
Kindergarten	16	16	34	19	50	35
1 st Grade	30	20	44	39	74	59
2 nd Grade	35	30	64	54	99	84
3 rd Grade	43	43	99	84	142	127
4 th Grade	80	74	160	149	240	223
5 th Grade	110	128	234	196	344	324
6 th Grade	193	169	264	224	457	393
7 th Grade	281	229	288	251	569	480
8 th Grade	372	293	348	273	720	566
9 th Grade	572	427	466	389	1,038	816
10 th Grade	500	490	425	381	925	871
11 th Grade	464	383	392	357	856	740
12 th Grade	414	286	344	273	758	559
Total	3,113	2,594	3,166	2,695	6,279	5,289

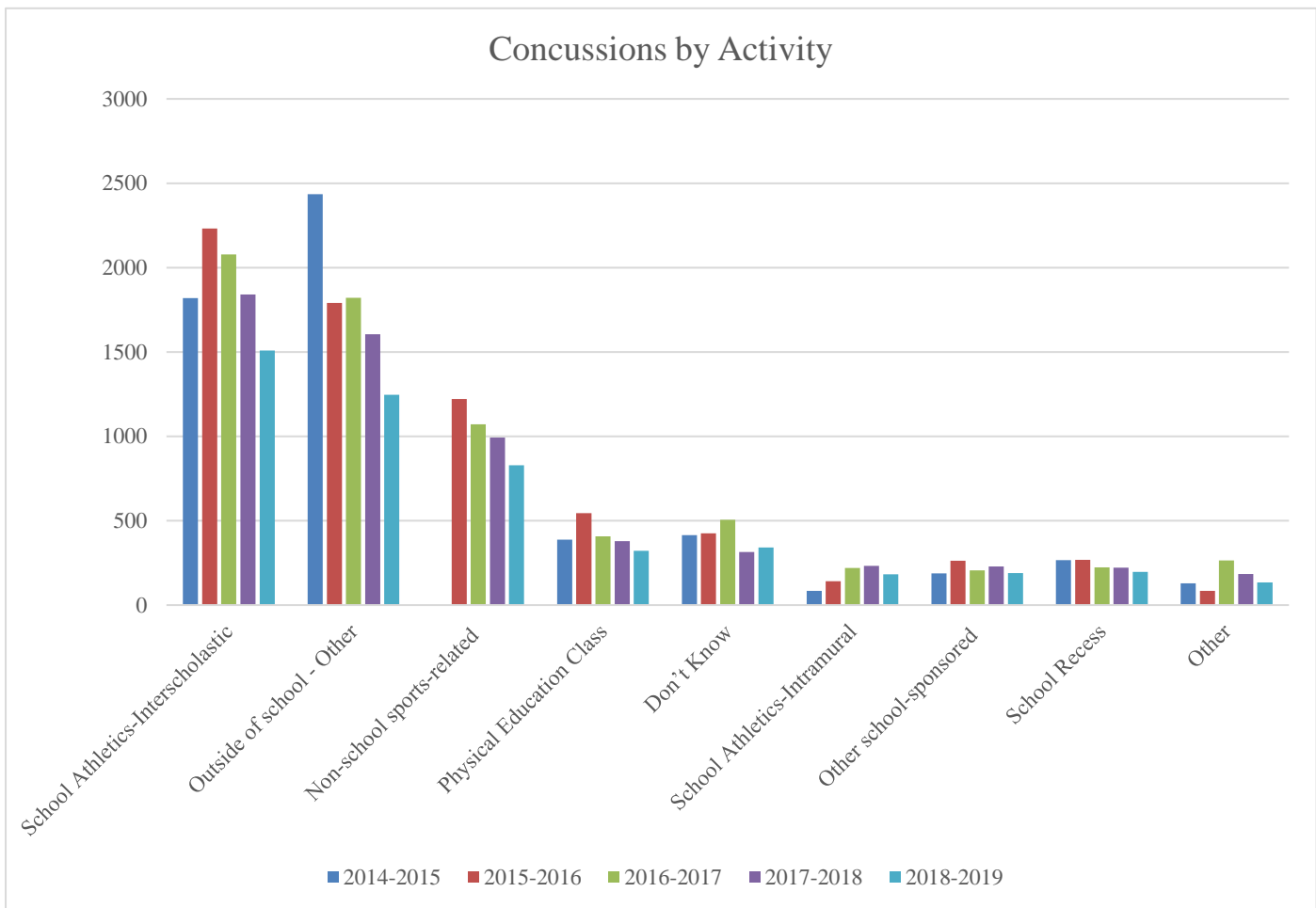
There were no statistically significant differences for concussion rates between female and male students or between 2017-2018 and 2018-2019.

B. Concussions by Activity

The number of diagnosed concussions by activity:

Activity	# of Diagnosed Concussions	% of Diagnosed Concussions
School Athletics-Interscholastic	1,509	30.5

Outside of school - Other	1,247	25.2
Non-school sports Related (i.e. Local Town Recreational Sports)	829	16.7
Don't know	342	6.9
Physical Education Class	321	6.5
School Recess	197	4.0
Any other school sponsored activities	190	3.8
School Athletics-Intramural	182	3.7
Other	134	2.7
Total	4,951	100%

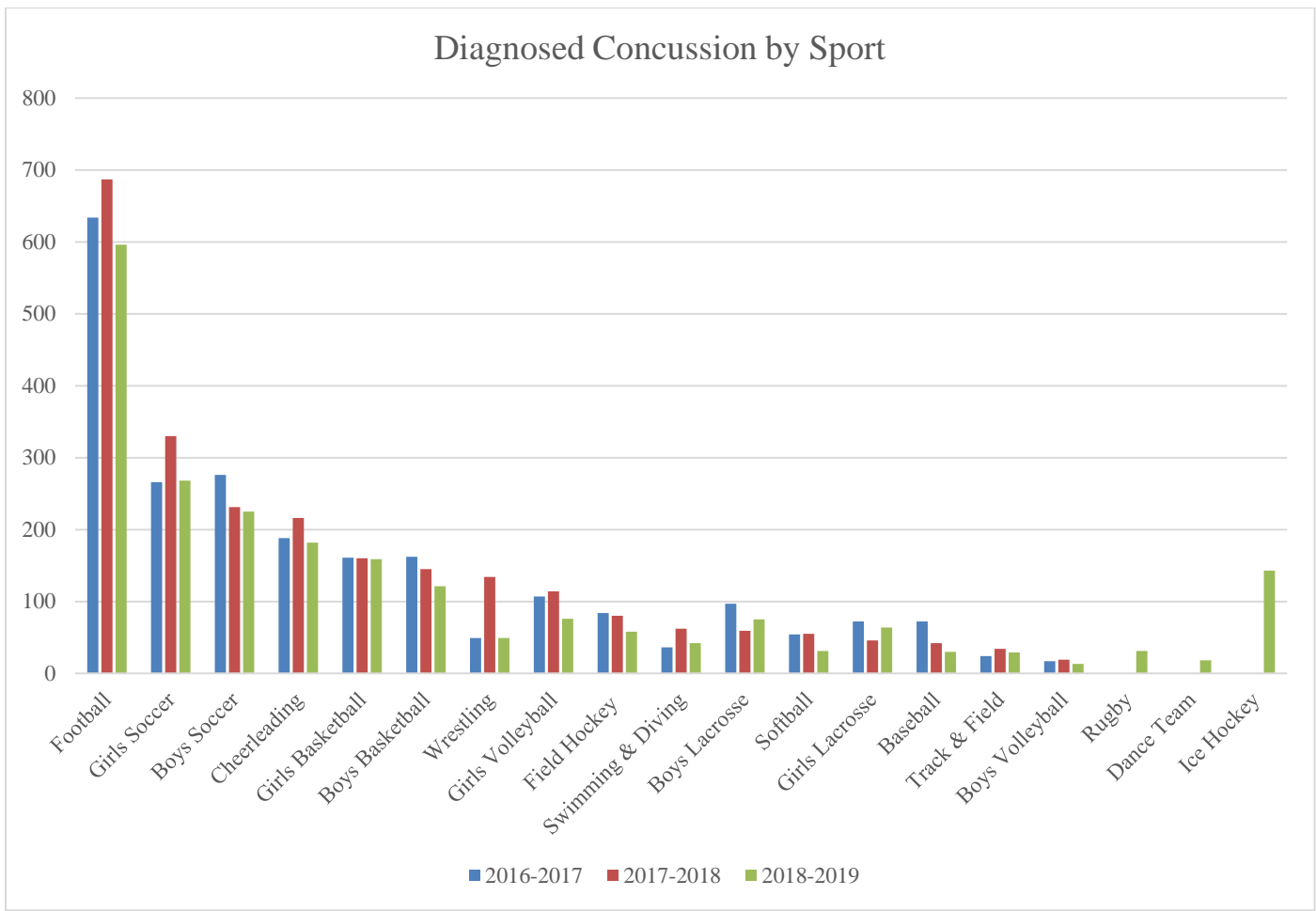


The highest number of reported diagnosed concussions occurred during Interscholastic Athletic Activities (30.5%), and Outside of School/Other reasons (25.2%). There is no available information for 'Other' reasons.

C. Diagnosed Concussions by Sport

Number of concussions that occurred during each of the following sports:

Sport	Occurrences	% of Occurrences
Football	596	22.1
Other	485	18.0
Girls Soccer	268	9.9
Boys Soccer	225	8.3
Cheerleading	182	6.8
Girls Basketball	159	5.9
Ice Hockey	143	5.3
Boys Basketball	121	4.5
Girls Volleyball	76	2.8
Boys Lacrosse	75	2.8
Girls Lacrosse	64	2.4
Field Hockey	58	2.2
Wrestling	49	1.8
Swimming and Diving	42	1.6
Rugby	31	1.2
Softball	31	1.2
Baseball	30	1.1
Track and Field	29	1.1
Dance Team	18	0.7
Boys Volleyball	13	0.5
Total	2695	100.0



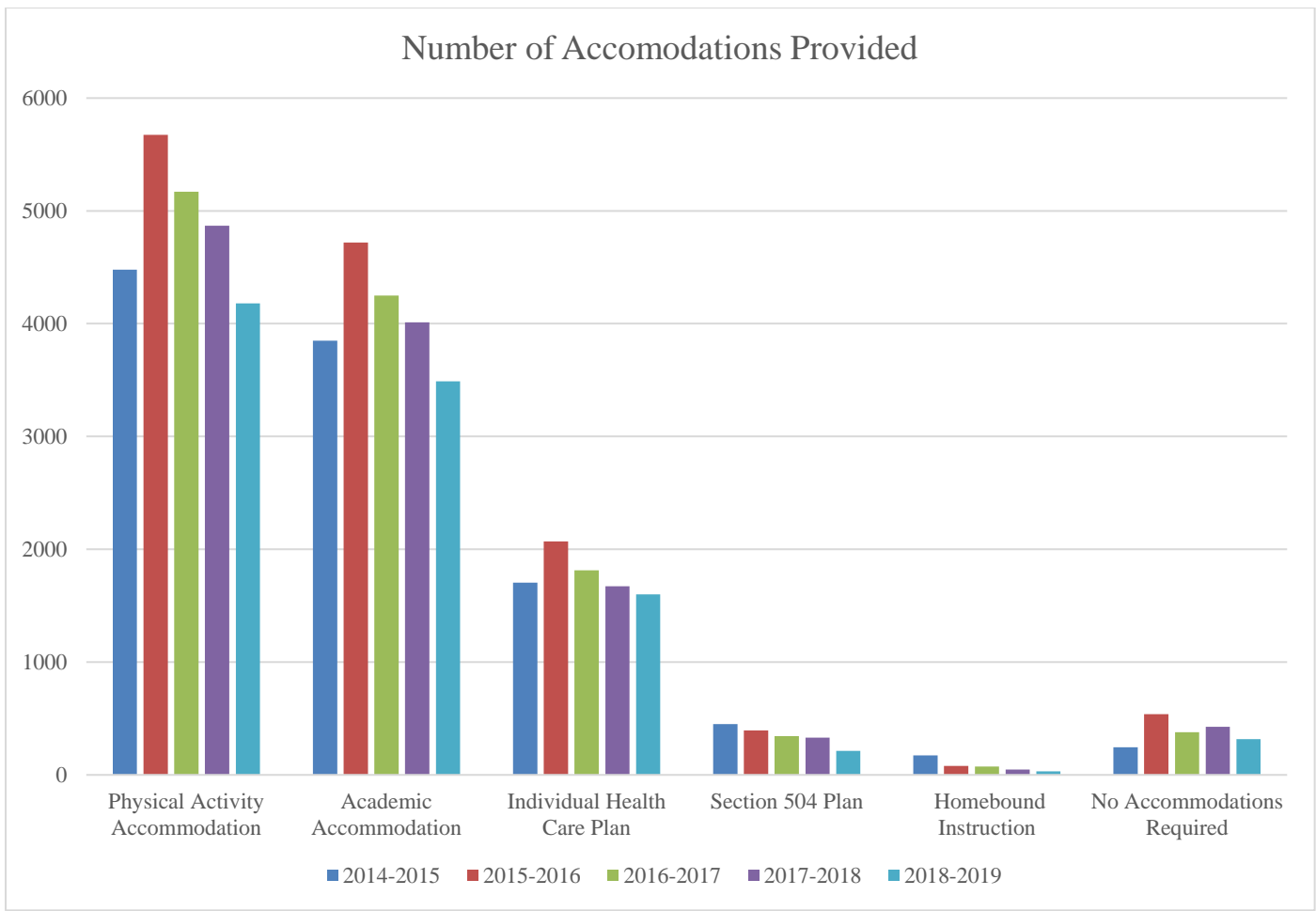
Football accounted for the most concussion occurrences among specific school-sponsored sports, resulting in 596 diagnosed concussions among reporting districts in 2018-19. Girls’ soccer was next with 268 concussions reported, followed by boys’ soccer with 225 occurrences. (Note: 2016-17 was the first year for which this data was collected.)

D. Type of Accommodation Provided

The number of accommodations provided as a result of a diagnosed concussion:

Accommodation	# of Accommodations Required ¹
Physical Activity Accommodations	4,181
Academic Accommodations	3,489
Individual Health Care Plan	1,599
No accommodations required	317
Section 504 Plan	214
Homebound Instruction	31

¹ The number of accommodations required were greater than the total number of concussions as many diagnosed concussions required more than one type of accommodation.

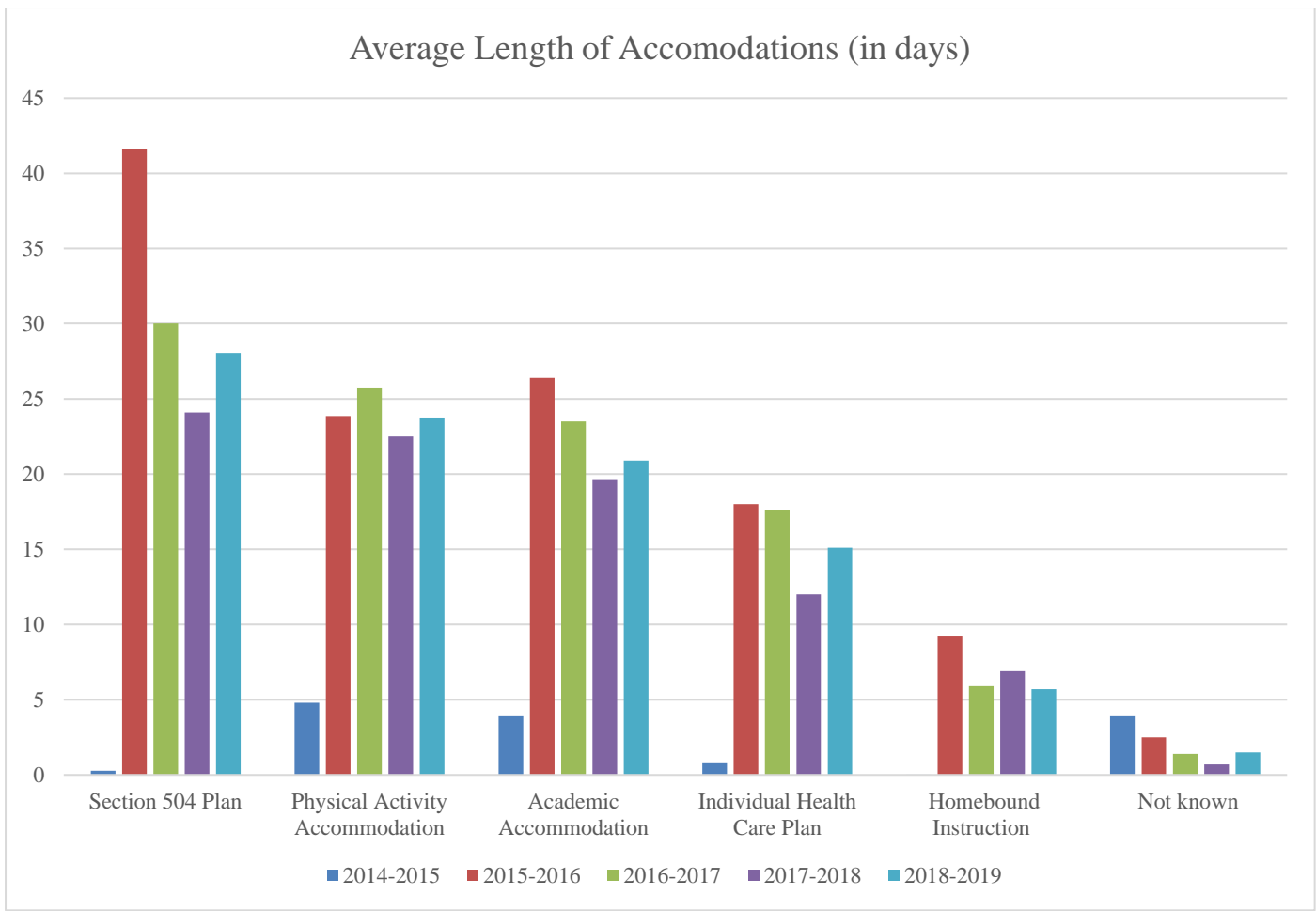


“Physical Activity Accommodations” and “Academic Accommodations” represent the largest number of interventions required. There were 31 directives for “Homebound Instruction” due to a diagnosed concussion.

E. Length of Accommodations

Of concussions diagnosed during school year 2018-19, the average length of time (in days) that accommodations were needed:

Accommodation	Average Length of Time (Days) Accommodations Were Needed
Section 504 Plan	28.0
Physical Activity Accommodations	23.7
Academic Accommodations	20.9
Individual Health Care Plan	15.1
Homebound Instruction	5.7
Not Known	1.5

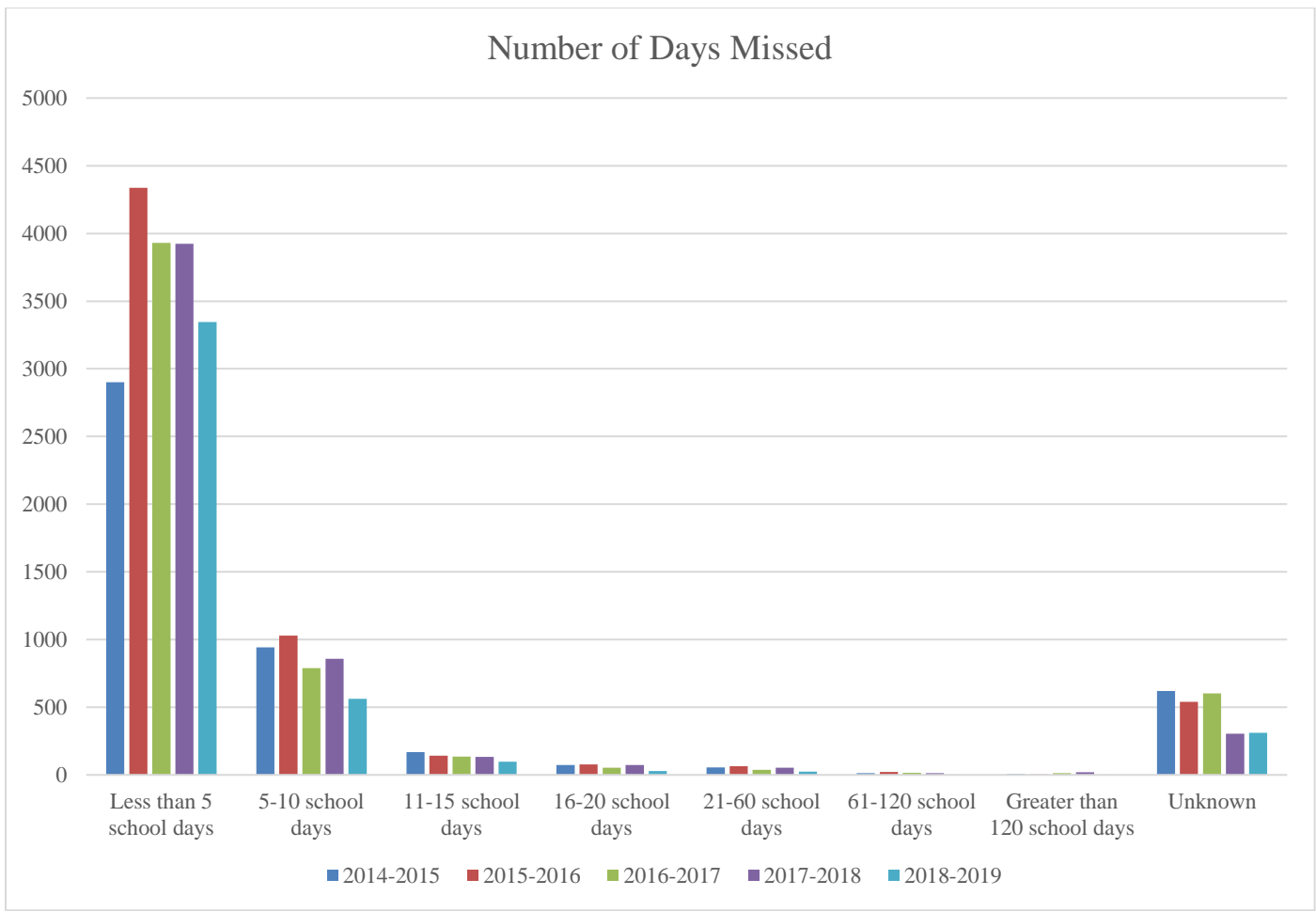


The average length of the “Physical Activity Accommodation” was 23.7 days while the average “Academic Accommodation” was 20.9 days. The average “Homebound Instruction” accommodation lasted 5.7 days.

F. Days Missed

The number of students who missed school days due to concussions during the 2018-2019 school year:

School Days Missed	# of Students
Less than 5 school days	3,346
5 to 10 school days	562
11 - 15 school days	97
16 - 20 school days	29
21 - 60 school days	25
61 - 120 school days	2
Greater than 120 school days	2
Unknown	311
Total	4,374



The majority (76.5%) of students diagnosed with a concussion missed less than 5 school days. 12.8% of students missed between 5 and 10 days of school while less than 1.0% of students missed more than 20 days of school.

IV. Demographics of Survey Respondents

District Reference Group	N Districts Responding	Percent
A	12	7.6
B	23	14.7
C	25	15.9
D	26	16.6
E	21	13.4
F	13	8.3
G	17	10.8
H	8	5.1
I	12	7.6
Total	157	100.0

Type of District	Number of Districts Responding	Percent
Urban	20	12.7

Suburban	90	57.3
Rural	47	29.9
Total	157	100.0

	Number of Districts Responding	Percent
Public School District	147	93.6
Charter School	4	2.6
Regional Educational Service Center	6	3.8
Total	157	100.0