

Appendix Table 1, Average monthly number of head injury emergency department visits, National Electronic Injury Surveillance System-All Injury Program, 2016-2019, United States.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Wgt. Est.	326,704	293,164	325,123	320,830	344,933	315,227	330,814	340,687	347,491	351,939	315,664	315,513
CI	255,447- 397,961	233,934- 352,394	261,901- 388,345	257,970- 383,690	277,667- 412,200	257,483- 372,972	269,798- 391,831	276,299- 405,075	279,491- 415,490	282,560- 421,317	252,157- 379,172	250,841- 380,184

Abbreviations: Wgt. Est. = weighted national estimate CI=confidence interval

Appendix Table 2, Average monthly rate of head injury emergency department visits rates per 100,000 population, by sex and age, National Electronic Injury Surveillance System-All Injury Program, 2016-2019, United States.

Sex	Age Group		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Male	0-4	Rate	184.5	173.9	219.8	208.2	240.5	228.4	242.0	248.6	217.4	204.6	190.1	175.3	
		CI	139.7-229.3	132.7-215.1	161.4-278.2	155.6-260.7	184.4-296.6	178.1-278.7	182.3-301.7	189.3-307.8	162.3-272.5	147.4-261.7	144.6-235.6	131.6-219.1	
	5-17	Rate	104.9	99.8	109.8	120.4	136.3	101.5	101.5	114.2	157.4	163.9	112.3	91.6	
		CI	79.1-130.6	77.8-121.7	82.7-136.9	93.8-147.0	105.4-167.2	77.5-125.5	79.6-123.4	89.2-139.3	120.7-194.2	127.1-200.7	88.1-136.5	72.0-111.1	
	18-25	Rate	102.9	97.7	98.8	99.2	102.9	99.9	107.0	115.3	108.9	116.9	99.1	94.5	
		CI	78.0-127.8	77.3-118.1	75.1-122.5	74.2-124.2	79.8-125.9	82.0-117.9	87.3-126.8	88.6-142.1	77.5-140.3	88.0-145.9	73.5-124.6	75.0-114.1	
	26-44	Rate	74.7	66.4	72.2	74.5	79.6	81.9	87.8	89.3	82.6	80.8	73.1	73.7	
		CI	57.0-92.4	51.8-80.9	55.1-89.2	55.7-93.2	59.5-99.7	60.6-103.1	65.5-110.1	65.9-112.6	60.7-104.6	59.2-102.4	55.2-90.9	53.5-93.8	
	45-64	Rate	81.5	70.9	78.8	77.5	83.4	78.0	88.4	90.6	80.4	78.8	75.5	75.6	
		CI	64.2-98.9	55.4-86.4	62.2-95.3	58.9-96.0	61.7-105.1	58.2-97.8	65.8-110.9	67.9-113.2	61.1-99.8	58.3-99.4	55.5-95.4	57.2-93.9	
	65+	Rate	159.3	142.7	156.6	151.0	146.5	143.2	155.5	149.1	153.8	162.3	151.8	163.1	
		CI	104.0-214.5	93.9-191.6	108.7-204.5	109.1-192.8	106.5-186.5	107.0-179.4	117.3-193.6	114.3-183.9	113.7-193.9	118.8-205.7	109.3-194.3	112.9-213.2	
	Female	0-4	Rate	142.4	130.1	163.8	162.9	177.2	163.5	167.6	163.3	156.7	157.3	141.5	138.5
			CI	106.4-178.4	102.3-157.8	118.1-209.5	117.8-208.0	130.1-224.2	126.8-200.2	127.6-207.6	119.3-207.3	118.6-194.8	114.1-200.6	102.8-180.2	104.9-172.2
		5-17	Rate	75.3	66.5	73.6	77.9	92.6	64.7	62.2	67.9	86.7	87.2	72.0	71.0
			CI	56.8-93.8	52.3-80.7	58.0-89.3	58.4-97.4	71.1-114.1	50.0-79.3	47.8-76.7	49.8-86.0	66.0-107.3	63.8-110.7	55.5-88.6	53.7-88.3
		18-25	Rate	97.7	94.7	95.7	100.1	102.4	95.0	102.3	98.9	104.9	99.2	98.7	100.0
			CI	77.3-118.0	73.7-115.8	73.4-118.0	77.3-122.9	76.0-128.8	75.9-114.1	77.9-126.8	78.7-119.0	74.3-135.4	75.1-123.2	74.8-122.5	77.3-122.6
26-44		Rate	67.4	52.9	62.8	58.5	66.9	59.0	61.2	67.0	62.9	57.8	57.6	61.3	
		CI	53.0-81.9	42.9-63.0	53.2-72.4	48.8-68.1	54.2-79.6	47.0-70.9	50.8-71.7	53.6-80.4	49.9-75.9	46.6-69.0	46.1-69.1	48.7-73.8	
45-64		Rate	66.7	61.7	64.7	61.5	62.5	60.3	63.1	65.0	66.8	66.9	60.7	66.0	

	CI	52.5- 80.9	47.7- 75.7	52.2- 77.3	48.9- 74.2	50.7- 74.2	48.0- 72.7	50.7- 75.5	51.8- 78.1	55.2- 78.5	53.6- 80.1	47.7- 73.8	50.7- 81.4
65+	Rate	187.7	165.1	182.3	168.9	178.7	170.6	171.8	173.7	175.8	192.7	185.2	190.5
	CI	122.5- 253.0	113.4- 216.7	129.6- 235.0	126.0- 211.8	131.6- 225.8	125.0- 216.3	127.7- 216.0	130.8- 216.7	135.5- 216.2	144.0- 241.3	132.9- 237.4	137.0- 243.9

Abbreviations: CI=confidence interval

Rate calculation: ED visits for head injury were used as the numerator. Bridged-race vintage census population estimates (<https://wonder.cdc.gov/bridged-race-population.html>) were used as the denominator

Appendix Table 3, Average monthly number of sports- and recreation-related head injury emergency department visits, National Electronic Injury Surveillance System-All Injury Program, 2016-2019, United States.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Wgt. Est.	31,983	30,728	34,526	39,064	43,613	36,444	36,115	40,564	52,606	50,414	30,238	27,620
CI	22,307- 41,658	22,241- 39,215	24,341- 44,711	27,735- 50,393	32,881- 54,346	27,366- 45,521	27,602- 44,627	30,964- 50,164	39,333- 65,879	37,364- 63,465	21,151- 39,324	19,651- 35,590

Abbreviations: Wgt. Est. = weighted national estimate CI=confidence interval

Appendix Table 4, Average monthly rate of sports- and recreation-related head injury emergency department visits rates per 100,000 population, by sex and age, National Electronic Injury Surveillance System-All Injury Program, 2016-2019, United States.

Sex	Age Group		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Male	0-4	Rate	9.5	7.7	14.5	19.6	22.1	22.5	21.3	17.5	14.9	15.3	10.1	8.7	
		CI	4.1-14.9	4.6-10.8	8.0-21.1	12.8-26.4	15.3-28.9	15.3-29.8	14.5-28.1	12.1-23.0	8.4-21.3	9.8-20.8	6.3-13.8	5.9-11.5	
	5-17	Rate	40.6	38.2	41.4	50.9	57.2	45.7	41.7	56.8	89.2	86.4	41.0	35.4	
		CI	28.2-53.0	26.5-49.9	28.6-54.2	36.1-65.6	43.6-70.8	31.1-60.2	30.8-52.7	43.0-70.6	65.4-112.9	63.3-109.5	29.8-52.1	25.3-45.5	
	18-25	Rate	18.1	17.4	19.0	18.7	17.0	15.3	16.3	21.4	21.1	23.1	14.8	12.0	
		CI	10.7-25.5	12.6-22.2	12.0-26.0	13.0-24.3	11.7-22.3	11.7-18.9	11.7-20.9	14.8-28.1	14.7-27.4	16.0-30.2	8.0-21.5	8.1-15.9	
	26-44	Rate	4.3	5.3	5.4	6.7	7.2	8.3	7.7	8.2	7.1	7.0	4.2	4.5	
		CI	2.4-6.1	3.1-7.5	3.2-7.6	3.8-9.6	5.0-9.5	6.0-10.5	5.7-9.8	6.1-10.4	4.7-9.4	4.3-9.7	2.4-6.1	3.0-6.0	
	45-64	Rate	3.3	3.5	4.7	4.7	5.7	5.0	6.7	6.9	6.0	5.0	4.3	3.7	
		CI	1.8-4.7	1.9-5.1	3.1-6.4	2.5-7.0	3.4-8.1	3.5-6.5	4.7-8.7	4.6-9.2	3.8-8.2	2.8-7.2	2.9-5.8	2.2-5.3	
	65+	Rate	5.5	6.1	7.2	6.7	6.7	4.4	5.8	4.6	5.2	6.3	3.9	5.6	
		CI	0.1-10.9	1.7-10.4	1.0-13.3	2.6-10.9	3.3-10.1	2.3-6.5	3.4-8.2	2.7-6.5	2.8-7.7	2.5-10.2	0.5-7.3	0.9-10.4	
	Female	0-4	Rate	6.7	5.9	7.4	11.6	12.5	11.0	9.5	6.7	11.4	10.9	5.3	4.7
			CI	3.7-9.7	2.2-9.7	4.9-9.9	6.7-16.6	7.7-17.3	7.2-14.8	6.3-12.8	4.2-9.2	6.0-16.8	6.7-15.1	2.3-8.4	2.5-6.9
		5-17	Rate	27.1	24.6	24.7	27.7	34.7	22.5	20.9	22.7	34.3	32.6	23.0	22.6
			CI	18.9-35.3	18.3-30.9	17.1-32.3	19.5-35.9	24.2-45.1	16.5-28.5	15.7-26.0	16.6-28.9	25.3-43.3	22.3-42.9	16.1-29.9	15.7-29.6
		18-25	Rate	8.0	8.7	7.8	10.1	6.9	10.1	12.2	9.1	13.2	11.8	8.0	6.2
			CI	5.4-10.6	5.2-12.2	3.9-11.7	6.0-14.1	4.4-9.5	6.5-13.7	7.8-16.6	6.3-11.8	8.6-17.7	7.0-16.6	4.5-11.5	3.3-9.2
26-44		Rate	3.1	2.3	4.4	3.2	5.6	3.8	4.6	4.3	4.0	2.6	2.9	3.1	

	CI	1.9- 4.3	1.4- 3.3	2.8- 6.0	1.9- 4.5	3.5- 7.8	2.4- 5.2	2.8- 6.3	2.6- 6.0	2.2- 5.9	1.6- 3.7	1.8- 4.0	1.8- 4.4
45-64	Rate	2.5	2.5	2.3	3.0	3.2	3.4	3.0	3.3	3.6	2.3	2.7	1.8
	CI	1.6- 3.4	1.3- 3.7	1.1- 3.6	1.6- 4.4	2.0- 4.3	2.0- 4.8	1.7- 4.2	2.0- 4.7	2.3- 4.9	1.2- 3.5	1.1- 4.2	1.1- 2.6
65+	Rate	2.8	2.9	4.1	2.9	2.2	2.5	2.5	2.5	2.7	3.3	2.4	2.4
	CI	0.9- 4.8	0.5- 5.3	0.5- 7.7	0.5- 5.3	0.7- 3.7	0.7- 4.3	1.4- 3.6	1.2- 3.7	1.3- 4.1	1.7- 4.8	0.3- 4.5	0.5- 4.3

Abbreviations: CI=confidence interval

Rate calculation: ED visits for sports and recreation related head injury were used as the numerator. Bridged-race vintage census population estimates (<https://wonder.cdc.gov/bridged-race-population.html>) were used as the denominator

Appendix Table 5, Average monthly number of top 3 sports- and recreation-related head injury emergency department visits in age 5-17 years by sex, National Electronic Injury Surveillance System-All Injury Program, 2016-2019, United States.

Sex	Sports		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Male	Football	Wgt. Est.	685	729	932	964	952	716	754	6,452	13,377	12,332	2,887	627
		CI	353- 1,018	416- 1,042	448- 1,416	558- 1,370	620- 1,285	395- 1,037	264- 1,244	4,603- 8,300	9,845- 16,910	9,240- 15,425	2,102- 3,673	344- 910
	Basketball	Wgt. Est.	2,824	2,481	1,850	1,821	2,058	1,541	736	486	1,233	1,397	1,870	2,429
		CI	2,080- 3,567	1,620- 3,343	1,182- 2,519	1,157- 2,486	1,411- 2,706	959- 2,122	510- 962	282- 690	676- 1,791	853- 1,941	1,266- 2,473	1,710- 3,148
	Bicycle	Wgt. Est.	574	592	800	1,309	1,929	1,736	1,757	2,024	1,602	1,379	555	454
		CI	90- 1,059	262- 922	440- 1,159	876- 1,741	1,422- 2,436	1,116- 2,356	1,176- 2,338	1,381- 2,667	1,078- 2,126	946- 1,812	292- 817	159- 748
Female	Basketball	Wgt. Est.	2,262	1,319	739	562	596	423	211	125	285	480	1,099	1,763
		CI	1,683- 2,841	861- 1,777	405- 1,073	296- 828	343- 849	244- 602	83- 339	19- 231	79- 490	278- 682	686- 1,513	1,253- 2,274
	Soccer	Wgt. Est.	396	530	686	1133	1215	578	275	468	1745	1647	461	656
		CI	11- 803	281- 779	331- 1,040	651- 1,615	571- 1,860	252- 904	74- 476	266- 669	1,058- 2,433	812- 2,481	205- 718	59- 1,253
	Playground	Wgt. Est.	465	309	769	922	1,318	610	561	748	1,056	1,099	676	270
		CI	118- 813	78- 541	426- 1,111	575- 1,270	894- 1,742	358- 861	347- 775	454- 1,043	522- 1,589	541- 1,656	388- 965	10- 529

Abbreviations: Wgt. Est. = weighted national estimate CI=confidence interval