

Table S1 Injury diagnosis classification (MAIS)

Injury diagnosis	MAIS=1 (minor injury)	MAIS≥2 (severe injury)
(Mild) traumatic brain injury		x
Other skull/brain		x
Open wound head	x	
Eye injury	x	
Fractured face	x	x
Open wound face	x	
Fracture/luxation/distortion spine		x
Whiplash	x	
Spinal cord injury		x
Internal organs injury		x
Fractured ribs/chest		x
Fractured collarbone/shoulder		x
Fractured upper arm		x
Fractured elbow/forearm		x
Fractured wrist		x
Fractured hand/fingers ¹	x	x
Shoulder/elbow ² luxation/distortion	x	x
Wrist/hand/fingers luxation/distortion	x	
Peripheral nerve arm/hand	x	
Complex arm/hand		x
Fractured pelvis		x
Fractured hip		x
Fractured thigh		x
Fractured knee/lower leg		x
Fractured ankle		x
Fractured foot/toes ³	x	x
Knee luxation/distortion		x
Ankle/foot luxation/distortion	x	
Hip luxation/distortion		x
Peripheral nerve leg/foot	x	
Complex leg/foot		x
Superficial injury	x	
Open wound	x	
Burn	x	
Intoxication	x	
Polytrauma		x
Foreign body	x	
No injury after examination	x	
Other injury	x	

¹ Fractured hand: MAIS≥2; fractured finger: MAIS=1.

² Shoulder luxation/distortion: MAIS≥2; elbow luxation/distortion: MAIS=1.

³ Fractured foot: MAIS≥2; fractured toe: MAIS=1.

Table S2 All sports activities coded in DISS database

Number	Sports activity	Number	Sports activity
1.	Air sports	34.	Ice hockey
2.	American football	35.	Ice sailing
3.	Archery	36.	Ice skating
4.	Athletics	37.	Inline skating
5.	Badminton	38.	Karting
6.	Ballet	39.	Korfball
7.	Baseball	40.	Motorcycle racing
8.	Basketball	41.	Motorsports
9.	Beach volleyball	42.	Mountain bike racing
10.	Billiards	43.	Parachuting
11.	BMX	44.	Physical education
12.	Bodybuilding	45.	Road cycle racing
13.	Bowling	46.	Roller skating
14.	Boxing	47.	Rowing
15.	Canoeing	48.	Rugby
16.	Climbing	49.	Running
17.	Combat sports	50.	Sailing
18.	Cricket	51.	Shooting sports
19.	Cross-country skiing	52.	Skateboarding
20.	Darts	53.	Skiing
21.	Dog sports	54.	Snowboarding
22.	Fencing	55.	Softball
23.	Field hockey	56.	Squash
24.	Fierljeppen	57.	Swimming
25.	Fishing	58.	Table tennis
26.	Fitness	59.	Tennis
27.	Soccer	60.	Trampolining
28.	Free running	61.	Volleyball
29.	Futsal	62.	Water polo
30.	Golf	63.	Water skiing
31.	Gymnastics	64.	Windsurfing
32.	Handball	65.	Wrestling
33.	Horse riding		

Table S3 Absolute number and 95% confidence interval of severe sports-related Emergency Department visits in the Netherlands (2009-2018), by sports activity (11-21)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Combat sports	1,300 (700-2,100)	1,200 (700-2,000)	1,300 (700-2,100)	1,400 (800-2,200)	1,300 (700-2,100)	1,100 (600-1,900)	1,000 (500-1,700)	1,200 (600-1,800)	1,200 (700-1,900)	1,200 (700-1,900)
Swimming	1,300 (700-2,000)	1,000 (500-1,700)	1,100 (600-1,900)	1,000 (500-1,700)	1,600 (900-2,400)	1,100 (600-1,800)	1,300 (700-2,000)	1,200 (700-1,900)	1,200 (700-900)	1,300 (700-2,000)
Tennis	1,200 (700-2,000)	1,100 (500-1,700)	1,100 (600-1,900)	1,200 (600-1,900)	1,100 (500-1,800)	900 (400-1,500)	800 (400-1,400)	700 (300-1,300)	800 (400-1,300)	800 (400-1,400)
Futsal	1,400 (800-2,200)	1,200 (700-2,000)	1,200 (600-2,000)	1,200 (700-2,000)	1,000 (500-1,700)	900 (400-1,500)	600 (200-1,200)	600 (200-1,100)	700 (300-1,200)	500 (200-1,000)
Skiing	1,200 (600-1,900)	1,000 (500-1,600)	1,000 (500-1,700)	800 (400-1,500)	800 (300-1,400)	700 (300-1,300)	800 (400-1,400)	800 (400-1,400)	800 (400-1,400)	1,100 (600-1,700)
Volleyball	900 (500-1,600)	900 (400-1,500)	1,000 (500-1,700)	1,000 (500-1,700)	900 (500-1,600)	700 (300-1,300)	700 (300-1,300)	700 (300-1,200)	800 (400-1,300)	800 (400-1,400)
Skateboarding	800 (300-1,400)	900 (500-1,600)	700 (300-1,200)	600 (300-1,200)	800 (300-1,400)	1,000 (500-1,700)	900 (400-1,600)	900 (500-1,500)	700 (300-1,200)	1,000 (500-1,600)
Running	600 (300-1,200)	600 (200-1,100)	700 (300-1,300)	700 (300-1,300)	700 (300-1,300)	1,000 (500-1,700)	1,000 (500-1,700)	900 (500-1,500)	800 (400-1,400)	700 (300-1,200)
Basketball	800 (300-1,400)	600 (200-1,200)	700 (300-1,300)	900 (400-1,500)	700 (300-1,300)	500 (200-1,100)	600 (200-1,100)	600 (200-1,100)	700 (300-1,300)	600 (300-1,200)
Snowboarding	700 (300-1,300)	800 (400-1,400)	700 (300-1,400)	600 (200-1,200)	400 (100-900)	600 (200-1,100)	600 (200-1,100)	600 (200-1,100)	500 (200-1,000)	600 (200-1,000)
Fitness	400 (100-900)	400 (100-900)	400 (<100-800)	500 (200-1,000)	600 (200-1,100)	500 (200-1,100)	600 (200-1,100)	500 (200-1,000)	600 (200-1,100)	800 (400-1,400)

Table S4 Absolute number and 95% confidence interval of severe sports-related Emergency Department visits in the Netherlands (2009-2018), by injury diagnosis (11-21)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Fractured upper arm	1,500 (800-2,300)	1,200 (700-2,000)	1,400 (800-2,200)	1,700 (1,000-2,600)	1,200 (600-1,900)	1,300 (700-2,100)	1,800 (1,100-2,700)	1,700 (1,100-2,600)	2,000 (1,300-2,800)	1,500 (900-2,300)
Muscle/tendon injury hand/finger	700 (300-1,300)	700 (300-1,200)	800 (400-1,400)	900 (400-1,600)	900 (400-1,500)	1,100 (500-1,800)	1,100 (600-1,800)	1,600 (900-2,400)	2,600 (1,800-3,600)	1,900 (1,200-2,700)
Knee luxation	900 (400-1,500)	800 (400-1,400)	1,000 (500-1,700)	1,200 (600-1,900)	900 (400-1,500)	1,200 (600-1,900)	1,100 (600-1,800)	1,100 (600-1,800)	1,200 (700-1,900)	1,000 (500-1,600)
Fractured spine/spinal cord injury	700 (300-1,300)	600 (200-1,100)	800 (400-1,500)	1,000 (500-1,700)	800 (400-1,500)	800 (400-1,500)	900 (400-1,600)	800 (400-1,400)	900 (400-1,400)	1,000 (500-1,600)
Fractured knee	700 (300-1,300)	500 (200-1,100)	600 (200-1,100)	700 (300-1,300)	700 (300-1,200)	700 (300-1,200)	700 (300-1,200)	600 (300-1,200)	600 (200-1,100)	800 (400-1,400)
Fractured ribs/chest	700 (300-1,200)	500 (200-1,000)	600 (200-1,200)	700 (300-1,200)	700 (300-1,300)	700 (300-1,200)	700 (300-1,200)	600 (300-1,200)	700 (300-1,200)	600 (200-1,100)
Fractured hip	700 (300-1,300)	500 (200-1,000)	400 (<100-800)	1,000 (500-1,700)	500 (200-1,100)	400 (100-900)	700 (300-1,200)	500 (200-1,000)	700 (300-1,200)	900 (400-1,500)
Muscle/tendon injury lower leg	1,100 (600-1,800)	900 (500-1,600)	700 (300-1,300)	800 (300-1,400)	500 (200-1,100)	500 (200-1,000)	300 (<100-700)	400 (100-800)	300 (<100-600)	200 (<100-600)
Severe traumatic brain injury	300 (<100-700)	300 (<100-700)	600 (200-1,100)	700 (300-1,300)	700 (300-1,200)	500 (200-1,100)	400 (100-900)	500 (200-1,000)	500 (200-1,000)	600 (300-1,100)
Fractured pelvis	300 (<100-700)	200 (<100-600)	300 (<100-700)	400 (<100-800)	300 (<100-700)	300 (<100-700)	300 (<100-700)	300 (<100-700)	500 (200-900)	500 (200-1,000)
Fractured thigh	300 (<100-700)	200 (<100-600)	300 (<100-700)	300 (<100-700)	200 (<100-600)	200 (<100-600)	200 (<100-600)	300 (<100-600)	300 (<100-700)	300 (<100-600)