



2019 AFLW Injury Report

Collaborators:

AFL Doctors Association

AFL Physiotherapists Association

AFL Football Operations Department

1 Key Indicators

Table 1 – Key indicators for all injuries

All injuries	2017 AFLW	2018 AFLW	2019 AFLW	2018 AFL
Incidence (new injuries per club per season)	6.4	6.8	6.8	39.1
Incidence (recurrent)	0.1	0.0	0.2	3.8
Incidence (total)	6.5	6.8	7.0	42.9
Prevalence (missed games per club per season)	17.3	21.3	17.8	163.5
New injury severity (average missed matches)	2.7	3.1	2.6	3.7
Recurrent injury severity (average missed matches)	2.0	-	1.0	3.9
Recurrence rate	2%	0%	3%	10%
Clubs participating	8/8	8/8	10/10	18/18
Average players per club	28.4	30.4	30.5	44.9

2 Injury Incidence – Total Injuries

Table 2 – Injury incidence

Body Area	2017 Per Club	2018 Per Club	2019 Per Club
Concussion	0.38	0.38	0.50
Other Head and Neck	0.13	0.00	0.00
Shoulder	0.50	0.50	0.50
Elbow, Wrist and Hand	0.25	0.38	0.60
Trunk and Back	0.25	0.13	0.10
Groin and Hip	0.38	0.38	0.00
Hamstring	0.75	1.25	0.70
Quadriceps	0.50	0.38	0.80
ACL (Knee)	1.00	1.13	0.90
MCL, PCL, LCL (Knee)	0.25	0.13	0.20
Other Knee	0.38	0.38	0.40
Ankle	0.63	0.50	0.60
Calf	0.25	0.13	0.40
Achilles	0.13	0.00	0.20
Other Leg and Foot	0.13	0.88	0.80
Medical Illnesses	0.50	0.25	0.30
Non-Football Injuries & General Soreness	0.00	0.00	0.00
Total	6.38	6.75	7.00

Table 3 – Injury incidence (per 1000 player hours)

Body Area	2017 AFLW	2018 AFLW	2019 AFLW	2018 AFL
Concussion	3.23	3.23	4.28	2.62
Other Head and Neck	0.00	0.00	0.00	0.81
Shoulder	3.23	3.23	2.57	2.31
Elbow, Wrist and Hand	0.00	3.23	2.57	1.71
Trunk and Back	2.16	0.00	0.00	1.41
Groin and Hip	1.08	2.16	0.00	2.62
Hamstring	3.23	2.16	1.71	7.85
Quadriceps	1.08	1.08	0.00	1.61
ACL (Knee)	4.31	6.47	5.14	1.11
MCL, PCL, LCL (Knee)	0.00	1.08	0.86	1.91
Other Knee	2.16	0.00	2.57	2.21
Ankle	4.31	2.16	1.71	3.32
Calf	0.00	1.08	1.71	2.62
Achilles	0.00	0.00	0.00	0.60
Other Leg and Foot	0.00	2.16	1.71	4.23
Medical Illnesses	-	-	-	-
Non-Football Injuries & General Soreness	-	-	-	-
Total	24.78	28.02	24.83	36.94

3 Injury Incidence Breakdown

Table 4 – Injury incidence breakdown

Body Area	2019 Total	AFLW Injuries		
		Match	Training	Other
Concussion	5	100%	0%	0%
Other Head and Neck	0	0%	0%	0%
Shoulder	5	60%	20%	20%
Elbow, Wrist and Hand	6	50%	50%	0%
Trunk and Back	1	0%	0%	100%
Groin and Hip	0	0%	0%	0%
Hamstring	7	29%	71%	0%
Quadriceps	8	0%	100%	0%
ACL (Knee)	9	67%	33%	0%
MCL, PCL, LCL (Knee)	2	50%	50%	0%
Other Knee	4	75%	25%	0%
Ankle	6	33%	50%	17%
Calf	4	50%	50%	0%
Achilles	2	0%	50%	50%
Other Leg and Foot	8	25%	63%	13%
Medical Illnesses	3	0%	0%	100%
Non-Football Injuries & General Soreness	0	0%	0%	0%
Total	70	41%	47%	11%

4 Injury Prevalence – Total Injuries

Table 5 – Injury prevalence

Body Area	2017 Per Club	2018 Per Club	2019 Per Club
Concussion	0.50	0.50	0.50
Other Head and Neck	0.13	0.00	0.00
Shoulder	1.38	1.75	1.50
Elbow, Wrist and Hand	0.25	0.88	1.70
Trunk and Back	0.38	0.25	0.20
Groin and Hip	0.38	1.25	0.00
Hamstring	1.50	3.25	0.90
Quadriceps	0.75	0.75	1.30
ACL (Knee)	5.38	6.88	4.80
MCL, PCL, LCL (Knee)	0.75	0.50	0.50
Other Knee	1.25	1.50	0.90
Ankle	2.00	1.63	1.80
Calf	0.88	0.13	0.50
Achilles	0.88	0.00	0.60
Other Leg and Foot	0.13	1.75	2.30
Medical Illnesses	0.75	0.25	0.30
Non-Football Injuries & General Soreness	0.00	0.00	0.00
Total	17.25	21.25	17.80

5 Injury Recurrence – Same Injury Type on Same Side Within Same Season

There were two injury recurrences in the 2019 AFLW season:

- Midfoot sprain (e.g. Lisfranc injury)
- Quadriceps strain

6 AFLW Concussion Audit – Diagnosed Concussions from AFLW Matches (Regardless of Matches Missed)

Table 6 – Summary of AFLW concussion audit (2017-2019)

Year	Number of Concussions	Number of Clubs	Matches	Player Hours	Incidence (Per 1000 Player Hours)	Average AFLW Concussions Per Club
2017	14	8/8	58	928	15.09 (95% CI 7.18-22.99)	1.75
2018	16	8/8	58	928	17.24 (95% CI 8.79-25.69)	2.00
2019	14	10/10	76	1216	11.51 (95% CI 5.48-17.54)	1.40
Total	44	26/26	192	3072	14.61 (95% CI 10.38-18.85)	1.69

Table 7 – Summary of AFL concussion audit (2011 - 2018)

Year	Number of Concussions	Number of Clubs	Matches	Player Hours	Incidence (Per 1000 Player Hours)	Average AFL Concussions Per Club	Incidence (Per Club Per Season) ^
2011	75	17/17	392	9408	7.97 (95% CI 6.17-9.78)	4.41	8.42
2012	68	13/18	300	7200	9.44 (95% CI 7.20-11.69)	5.23	9.97
2013	61	17/18	389	9336	6.53 (95% CI 4.89-8.17)	3.59	6.90
2014	58	18/18	414	9936	5.84 (95% CI 4.34-7.34)	3.22	6.16
2015	52	16/18	360	8640	6.02 (95% CI 4.38-7.65)	3.25	6.36
2016	63	17/18	391	9384	6.71 (95% CI 5.06-8.37)	3.71	7.09
2017	63	17/18	392	9408	6.70 (95% CI 5.04-8.35)	3.71	7.07
2018	74	18/18	414	9936	7.45 (95% CI 5.75-9.14)	4.11	7.86
TOTAL	514	133	3052	73246	7.08 (95% CI 6.48-7.69)	3.86	7.41

^ Calculated as number of concussions per club per season (assuming 40 players and 22 rounds per season).

7 Observations

- The overall injury incidence for the 2019 AFLW season was 6.8 new injuries per club, and injury prevalence of 17.8 matches missed per club. The recurrence rate was 3%.
- When scaled for comparability to the AFL Injury Report using a per 1000 player hours basis, the 2019 AFLW injury incidence becomes 24.8 injuries per 1000 player hours, which is reduced from the 2018 AFLW injury incidence that was 28.0 injuries per 1000 player hours.
- ACL injuries exhibited the highest incidence and prevalence of all the injury categories, with an average of 0.9 new injuries per club resulting in 4.8 matches missed in the 2019 AFLW season. These numbers have reduced compared to the 2018 AFLW season which produced 1.1 new injuries per club resulting in 6.9 matches missed.
- When scaled for comparability to the AFL Injury Report, the ACL injury incidence becomes 5.1 injuries per 1000 player hours in the 2019 AFLW season, compared to 6.5 injuries per 1000 player hours in the 2018 AFLW season.
- The incidence of concussions causing matches to be missed was 4.3 injuries per 1000 player hours in the 2019 AFLW season, compared to 3.2 injuries per 1000 player hours in the 2018 AFLW season and 2.6 injuries per 1000 player hours in the 2018 AFL season. This increase reflects the ongoing conservative management approach.
- The incidence rate from the 2019 AFLW concussion audit (which includes concussions regardless of whether matches are missed) was 11.5 per 1000 player hours (95% confidence interval 5.5 – 17.5), which equates to a total of 14 concussions for the 2019 AFLW season. In the previous season, the incidence rate from the 2018 AFLW concussion audit was 17.2 per 1000 player hours (95% confidence interval 8.8 – 25.7), which equates to a total of 16 concussions. The equivalent AFL concussion rate for the 2018 season was 7.5 per 1000 player hours (95% confidence interval 5.8 – 9.1), which equates to a total of 74 concussions.