UEFA Elite Club Injury Study

2013/14 season report

Team X

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The UEFA Elite Club Injury Study was initiated and is funded and supported by UEFA.

On behalf of the UEFA Medical Committee:
Professor Jan Ekstrand, MD, PhD, Linköping University
Vice-chairman of the UEFA Medical Committee

Correspondence should be addressed to:

Injury study group
Professor Jan Ekstrand
Solstigen 3
58943 Linköping
Sweden
+46 13 161648
+46 13 161892 (fax)
jan.ekstrand@telia.com
info.frg@telia.com

UEFA
Marc Vouillamoz
Head of Medical and Anti-Doping Unit
marc.vouillamoz@uefa.ch

Mike Earl
Medical and Anti-Doping Manager
mike.earl@uefa.ch

Route de Gèneve 46
1260 Nyon 2
Switzerland
+41 848 00 27 27
+41 22 707 27 34 (fax)

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1 Participating clubs

This report contains results from the full 2013/14 season (July 2013 to May 2014) and includes data from 29 clubs that delivered full details during the season.

Belgium	Club Brugge KV	RSC Anderlecht		
Denmark	FC København			
England	Arsenal FC	Chelsea FC	Liverpool FC	Manchester City FC
	Manchester United FC	Tottenham Hotspur FC		
France	Olympique de Marseille	Paris Saint-Germain FC		
Germany	Bayer 04 Leverkusen	BV Borussia 09 Dortmund	FC Bayern München	FC Schalke 04
Greece	Olympiacos FC	Panathinaikos FC		
Italy	AC Milan	FC Internazionale Milano	Juventus FC	SSC Napoli
Netherlands	AFC Ajax	PSV Eindhoven		
Portugal	FC Porto	SL Benfica		
Scotland	Celtic FC			
Spain	FC Barcelona	Real Madrid CF		
Ukraine	FC Shakhtar Donetsk			

2 Presentation

The report is divided into nine sections, with data on exposure, general injury patterns, training injuries, match injuries, severe injuries, muscle/tendon injuries, joint/ligament injuries, re-injuries, and squad attendance/availability and absence. Each injury section is split into four sub-sections:

- **Injury patterns:** the number of injuries of this type over the season and their relative distribution as a percentage of the total number of injuries, looking at injury location, type, mechanism, overuse/trauma, contact/non-contact, severity, re-injury rate, monthly distribution and injury occasion.

- **Injury incidence:** the number of injuries of this type relative to exposure time, allowing the individual injury rate to be evaluated. Injury incidence is expressed as the number of injuries/1,000 hours of exposure.

- **Days' absence:** total number of days lost because of specific injuries and the minimum, maximum and average period of absence for such injuries.

- **Injury burden:** a combined measure of the frequency (incidence) and severity (days´ absence) of injuries giving the burden of injury for the player and the consequences for the team. Injury burden is expressed as the number of days of absence/1,000 hours of exposure. Example: Team A with 10 injuries in 5,000 hours, each resulting in an absence of 10 days on average, has an injury burden of 20 days/1,000 hours. Team B with 20 injuries in 5,000 hours, each resulting in an absence of 5 days on average, also has an injury burden of 20 days/1,000 hours.

3 Interpretation of results

When comparing the results of your club with other participating clubs, please bear the following in mind:

- Because of the limited data collected over one season, the relative percentages or injury incidences presented are sometimes based on few actual injuries. This means that some results should be interpreted with caution.

- The overall number of injuries varies between clubs, mainly because of the number of slight injuries. It is therefore important not only to focus on the injury incidence (i.e. number of injuries) but also to study the injury burden (i.e. number + severity of injuries), severe injuries and squad availability figures, as these variables may have a greater impact on the club.

- In the case of players who were still injured at the end of the season, we have used either the club's estimated return date or an approximation of severity based on the mean absence for this particular injury. Some data on the number of days' absence and injury risk presented in the report could therefore be based on approximate values/estimates.

We hope that you will find this report useful in your daily work, treating and preventing injuries at your club. Please do not hesitate to contact the study group if you have any questions about how to interpret the results. Please also inform us of any other analyses you would like us to include in the future. We appreciate your feedback.

Thank you for your assistance and support with the study during the 2013/14 season. We look forward to continuing this cooperation in the future.

4 Exposure

In total, 200,000 hours of exposure were recorded during 2013/14, with approximately 170,000 training hours (85%) and 30,000 match hours (15%). **Team X** had 8,300 hours of total exposure, with 7,421 (89%) training hours and 879 (11%) match hours.

On average, teams had 213 training sessions and 59 matches over the season. Since the reporting period differed between teams, we also calculated a monthly training and match load. On average teams had 19.7 training sessions and 5.5 matches per month, giving an average training-match ratio of 3.6 training sessions per match.

Figure 1. Number of training sessions per month

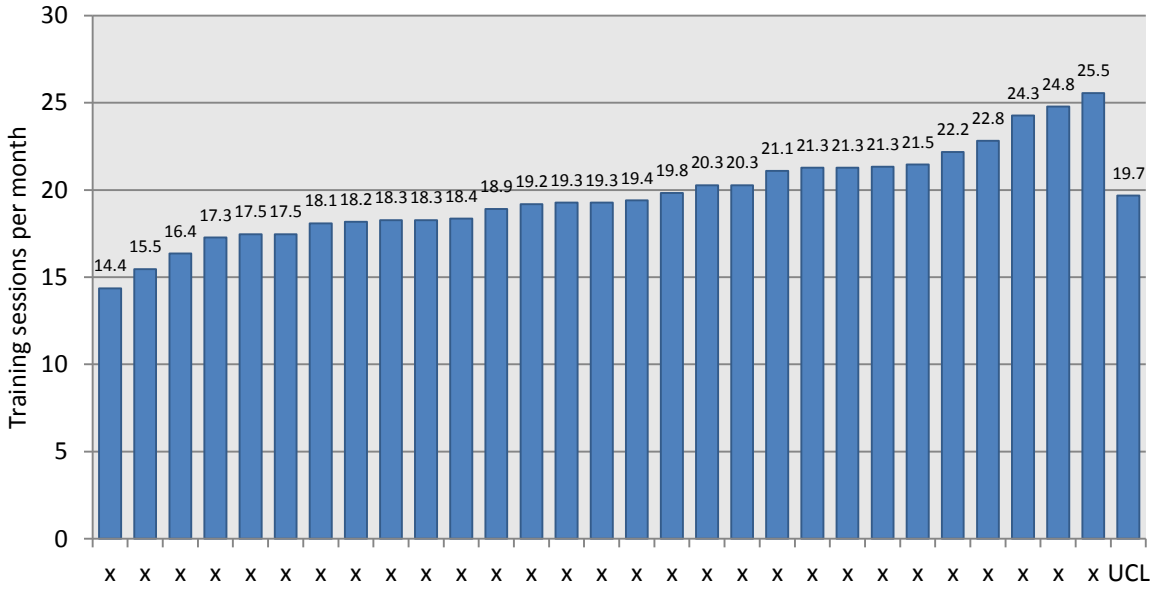


Figure 2. Number of matches per month

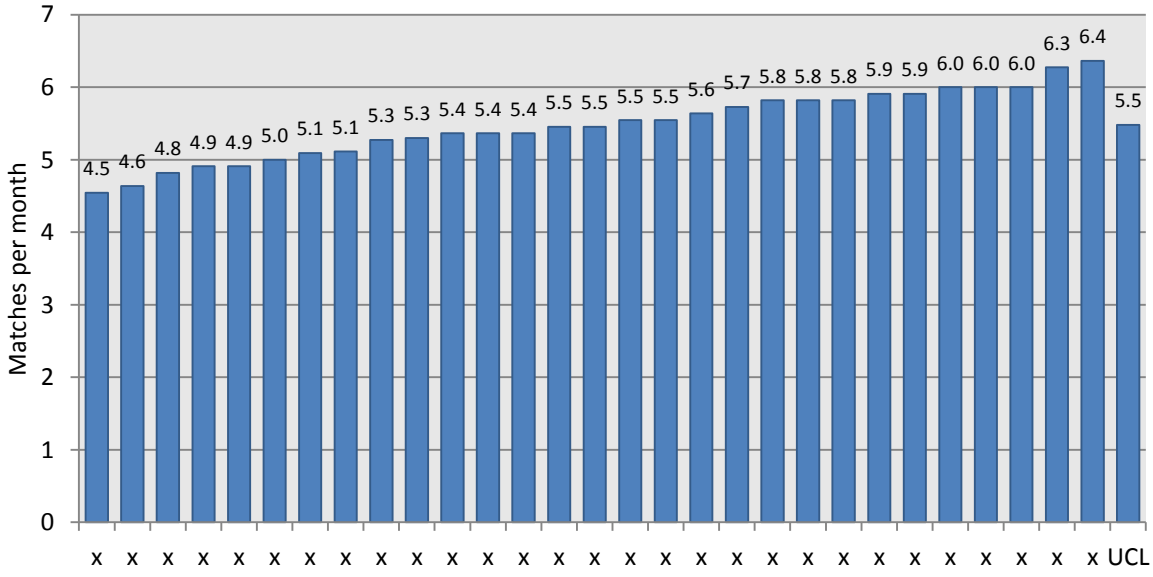


Figure 3. Training-match ratio

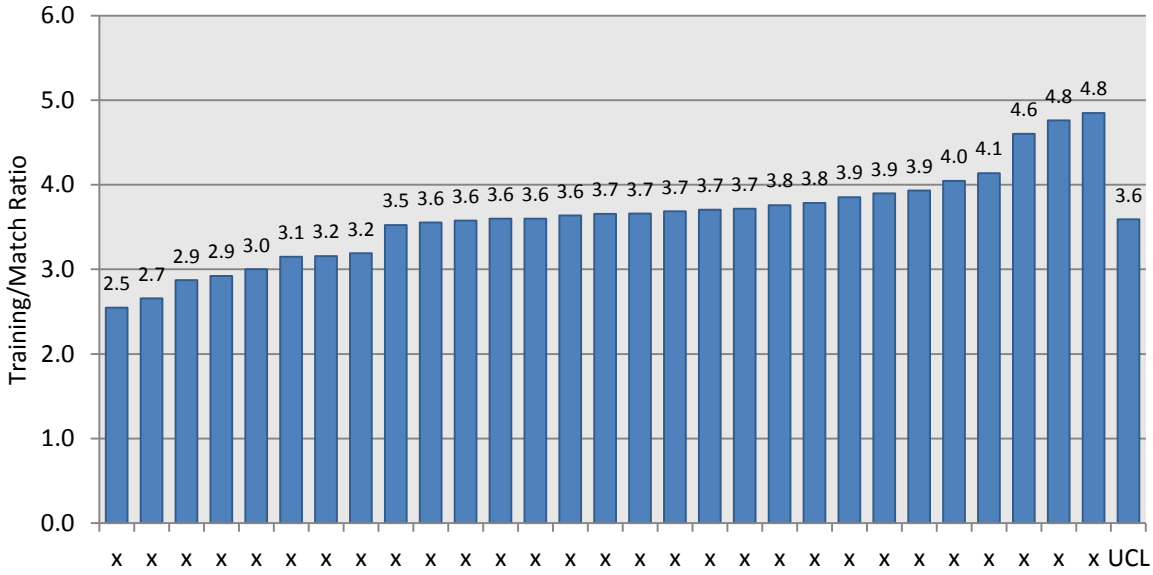
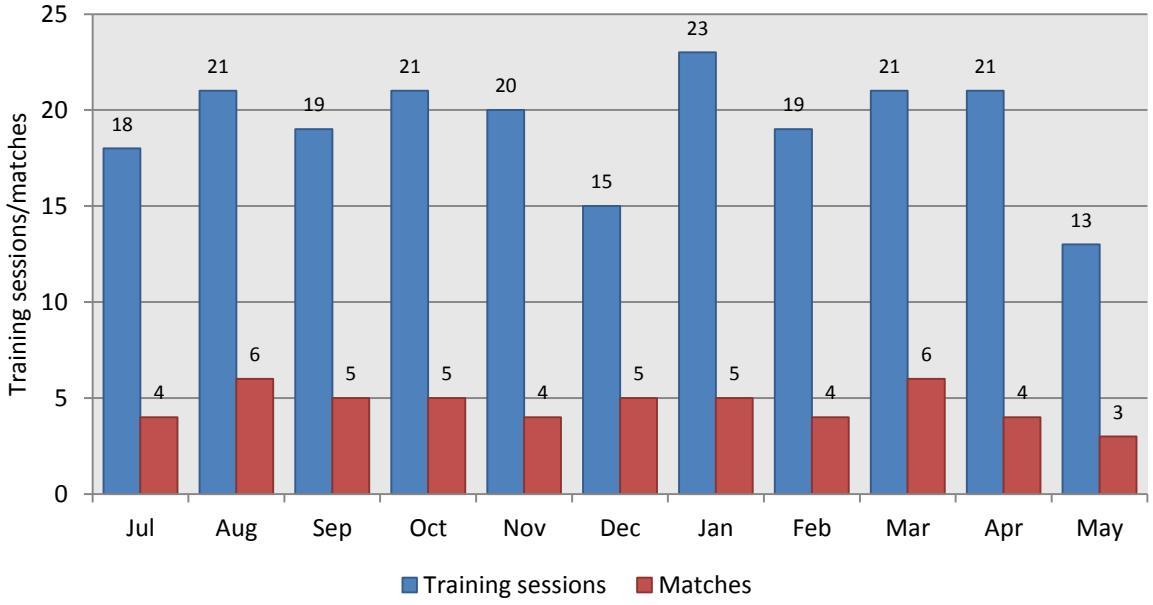


Figure 4. Number of training sessions (blue bars) and matches (red bars) for **Team X** over the season



5 General injury patterns

The tables below show the number (N) and relative distribution (%) of different injuries. In total, 1,324 injuries were included in the analyses – 739 match injuries (56%) and 585 training injuries (44%).

Data from **Team X** included 24 injuries (8 match injuries, 16 training injuries) from July to December.

Table 1. Injury locations

	Training				Match play				Total			
	Team X		Other teams		Team X		Other teams		Team X		Other teams	
	N	%	N	%	N	%	N	%	N	%	N	%
Head/face	0	0	6	1.1	0	0	20	2.8	0	0	26	2
Neck/cervical spine	0	0	4	0.7	0	0	1	0.1	0	0	5	0.4
Shoulder/clavicle	0	0	10	1.8	0	0	27	3.7	0	0	37	2.9
Elbow	0	0	1	0.2	0	0	1	0.1	0	0	2	0.2
Forearm	0	0	0	0	0	0	3	0.4	0	0	3	0.2
Wrist	0	0	0	0	0	0	1	0.1	0	0	1	0.1
Hand/finger/thumb	0	0	5	0.9	0	0	5	0.7	0	0	10	0.8
Sternum/ribs/upper back	0	0	8	1.4	0	0	5	0.7	0	0	13	1
Abdomen	0	0	12	2.1	0	0	8	1.1	0	0	20	1.6
Lower back/pelvis/sacrum	0	0	31	5.5	0	0	27	3.7	0	0	58	4.5
Hip/groin	4	25	86	15.3	1	12.5	100	13.8	5	20.8	186	14.5
Thigh	7	43.8	153	27.3	4	50	196	27	11	45.8	349	27.1
Knee	2	12.5	111	19.8	1	12.5	127	17.5	3	12.5	238	18.5
Lower leg/Achilles tendon	1	6.3	54	9.6	1	12.5	55	7.6	2	8.3	109	8.5
Ankle	0	0	56	10	1	12.5	106	14.6	1	4.2	162	12.6
Foot/toe	2	12.5	24	4.3	0	0	44	6.1	2	8.3	68	5.3
Total	**16**	**100**	**561**	**100**	**8**	**100**	**726**	**100**	**24**	**100**	**1,287**	**100**

Table 2. Injury types

	Training				Match play				Total			
	Team X		Other teams		Team X		Other teams		Team X		Other teams	
	N	%	N	%	N	%	N	%	N	%	N	%
Fracture	0	0	15	2.7	0	0	32	4.4	0	0	47	3.6
Other bone injury	0	0	3	0.5	0	0	7	1	0	0	10	0.8
Dislocation/subluxation	0	0	4	0.7	0	0	14	1.9	0	0	18	1.4
Sprain/ligament injury	3	18.8	78	13.9	1	12.5	145	19.9	4	16.7	223	17.3
Meniscus/cartilage	0	0	22	3.9	0	0	17	2.3	0	0	39	3
Muscle rupture/strain/cramps	12	75	208	37.1	6	75	277	38.1	18	75	485	37.7
Tendon injury/rupture/tendinosis	0	0	57	10.2	1	12.5	31	4.3	1	4.2	88	6.8
Haematoma/contusion/bruise	0	0	58	10.3	0	0	112	15.4	0	0	170	13.2
Abrasion	0	0	2	0.4	0	0	2	0.3	0	0	4	0.3
Laceration	0	0	5	0.9	0	0	5	0.7	0	0	10	0.8
Concussion	0	0	1	0.2	0	0	14	1.9	0	0	15	1.2
Nerve injury	0	0	5	0.9	0	0	0	0	0	0	5	0.4
Synovitis/effusion	0	0	21	3.7	0	0	23	3.2	0	0	44	3.4
Overuse, unspecified	0	0	52	9.3	0	0	33	4.5	0	0	85	6.6
Other injury	1	6.3	30	5.3	0	0	15	2.1	1	4.2	45	3.5
Total	**16**	**100**	**561**	**100**	**8**	**100**	**727**	**100**	**24**	**100**	**1,288**	**100**

Table 3. Injury mechanism

	Training				Match play				Total			
	Team X		Other teams		Team X		Other teams		Team X		Other teams	
	N	%	N	%	N	%	N	%	N	%	N	%
Running/sprinting	1	6.3	75	14.9	3	37.5	135	20	4	16.7	210	17.8
Twisting/turning	1	6.3	40	8	0	0	45	6.7	1	4.2	85	7.2
Shooting	8	50	53	10.5	2	25	34	5	10	41.7	87	7.4
Passing/crossing	0	0	29	5.8	0	0	21	3.1	0	0	50	4.2
Dribbling	2	12.5	0	0	0	0	4	0.6	2	8.3	4	0.3
Jumping/landing	0	0	35	7	0	0	39	5.8	0	0	74	6.3
Falling/diving	0	0	8	1.6	1	12.5	24	3.6	1	4.2	32	2.7
Stretching	0	0	14	2.8	0	0	29	4.3	0	0	43	3.7
Sliding	2	12.5	6	1.2	0	0	9	1.3	2	8.3	15	1.3
Overuse	0	0	111	22.1	0	0	76	11.3	0	0	187	15.9
Hit by ball	0	0	13	2.6	0	0	2	0.3	0	0	15	1.3
Collision	0	0	33	6.6	0	0	61	9	0	0	94	8
Heading	0	0	3	0.6	0	0	5	0.7	0	0	8	0.7
Tackled	2	12.5	19	3.8	2	25	78	11.6	4	16.7	97	8.2
Tackling	0	0	5	1	0	0	19	2.8	0	0	24	2
Kicked	0	0	32	6.4	0	0	69	10.2	0	0	101	8.6
Blocked	0	0	13	2.6	0	0	7	1	0	0	20	1.7
Use of arm/elbow	0	0	0	0	0	0	9	1.3	0	0	9	0.8
Other acute mechanism	0	0	14	2.8	0	0	9	1.3	0	0	23	2
Total	**16**	**100**	**503**	**100**	**8**	**100**	**675**	**100**	**24**	**100**	**1,178**	**100**

Table 4. Overuse/trauma distribution

	Training				Match play				Total			
	Team X		Other teams		Team X		Other teams		Team X		Other teams	
	N	%	N	%	N	%	N	%	N	%	N	%
Overuse	13	81.3	227	40.5	6	75	183	25.2	19	79.2	410	31.8
Trauma	3	18.8	334	59.5	2	25	544	74.8	5	20.8	878	68.2
Total	**16**	**100**	**561**	**100**	**8**	**100**	**727**	**100**	**24**	**100**	**1,288**	**100**

Table 5. Contact/non-contact distribution

	Training				Match play				Total			
	Team X		Other teams		Team X		Other teams		Team X		Other teams	
	N	%	N	%	N	%	N	%	N	%	N	%
Non-contact	14	87.5	432	77.1	6	75	432	59.4	20	83.3	864	67.1
Contact player	2	12.5	113	20.2	2	25	290	39.9	4	16.7	403	31.3
Contact object	0	0	15	2.7	0	0	5	0.7	0	0	20	1.6
Total	**16**	**100**	**560**	**100**	**8**	**100**	**727**	**100**	**24**	**100**	**1,287**	**100**

Table 6. Injury severity

	Training				Match play				Total			
	Team X		Other teams		Team X		Other teams		Team X		Other teams	
	N	%	N	%	N	%	N	%	N	%	N	%
Slight [0 days]	0	0	4	0.7	0	0	0	0	0	0	4	0.3
Minimal [1-3 days]	0	0	116	20.4	0	0	110	15	0	0	226	17.4
Mild [4-7 days]	0	0	151	26.5	1	12.5	192	26.3	1	4.2	343	26.4
Moderate [8-28 days]	11	68.8	213	37.4	4	50	282	38.6	15	62.5	495	38.1
Severe [>28 days]	5	31.3	85	14.9	3	37.5	147	20.1	8	33.3	232	17.8
Total	**16**	**100**	**569**	**100**	**8**	**100**	**731**	**100**	**24**	**100**	**1,300**	**100**

Table 7. Re-injury rate

	Training				Match play				Total			
	Team X		Other teams		Team X		Other teams		Team X		Other teams	
	N	%	N	%	N	%	N	%	N	%	N	%
No re-injury	15	93.8	512	90	8	100	666	91.1	23	95.8	1178	90.6
Re-injury	1	6.3	52	9.1	0	0	59	8.1	1	4.2	111	8.5
Unknown	0	0	5	0.9	0	0	6	0.8	0	0	11	0.8
Total	**16**	**100**	**569**	**100**	**8**	**100**	**731**	**100**	**24**	**100**	**1,300**	**100**

Table 8. Monthly distribution of injuries

	Training				Match play				Total			
	Team X		Other teams		Team X		Other teams		Team X		Other teams	
	N	%	N	%	N	%	N	%	N	%	N	%
July	3	18.8	52	9.1	0	0	48	6.6	3	12.5	100	7.7
August	3	18.8	52	9.1	0	0	64	8.8	3	12.5	116	8.9
September	1	6.3	63	11.1	0	0	81	11.1	1	4.2	144	11.1
October	5	31.3	62	10.9	1	12.5	77	10.5	6	25	139	10.7
November	1	6.3	60	10.5	2	25	81	11.1	3	12.5	141	10.8
December	0	0	40	7	0	0	80	10.9	0	0	120	9.2
January	1	6.3	59	10.4	1	12.5	66	9	2	8.3	125	9.6
February	0	0	58	10.2	2	25	59	8.1	2	8.3	117	9
March	1	6.3	55	9.7	1	12.5	93	12.7	2	8.3	148	11.4
April	1	6.3	42	7.4	1	12.5	53	7.3	2	8.3	95	7.3
May	0	0	26	4.6	0	0	29	4	0	0	55	4.2
June	0	0	0	0	0	0	0	0	0	0	0	0
Total	**16**	**100**	**569**	**100**	**8**	**100**	**731**	**100**	**24**	**100**	**1,300**	**100**

Table 9. Injury occasion

	Training				Match play				Total			
	Team X		Other teams		Team X		Other teams		Team X		Other teams	
	N	%	N	%	N	%	N	%	N	%	N	%
First team	16	100	548	97.7	8	100	636	87.2	24	100	1,184	91.8
Reserve team	0	0	3	0.5	0	0	49	6.7	0	0	52	4
National team	0	0	10	1.8	0	0	44	6	0	0	54	4.2
Total	**16**	**100**	**561**	**100**	**8**	**100**	**729**	**100**	**24**	**100**	**1,290**	**100**

5.1 Training injury patterns

5.1.1 Incidence of training injuries

The mean training injury incidence for all teams was 3.4 injuries/1,000 training hours, ranging from 0.6 to 7.7.

Figure 5. Training injury incidence

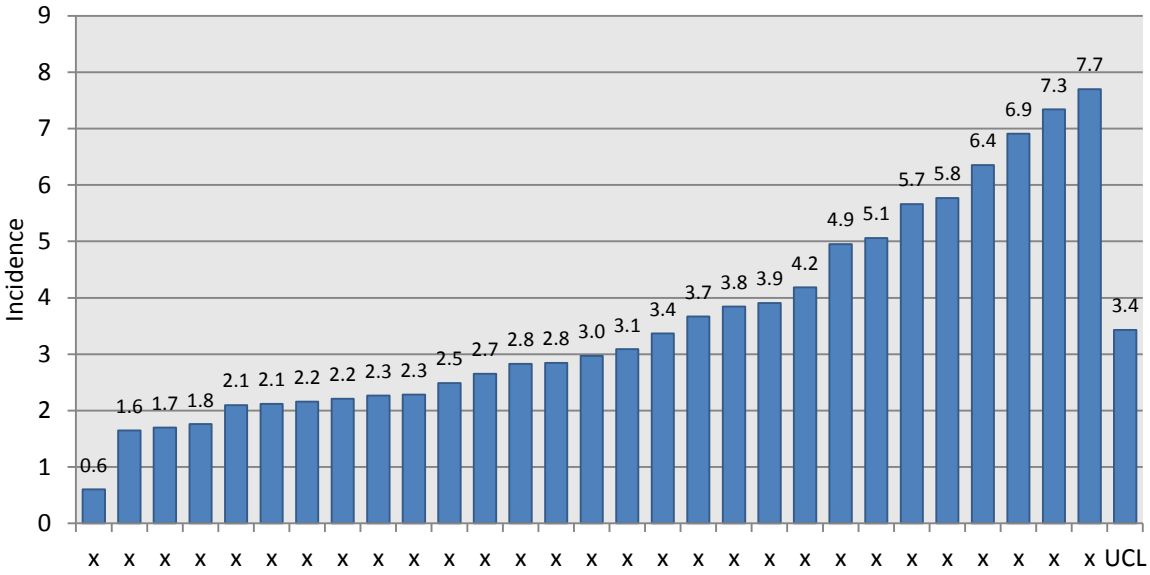
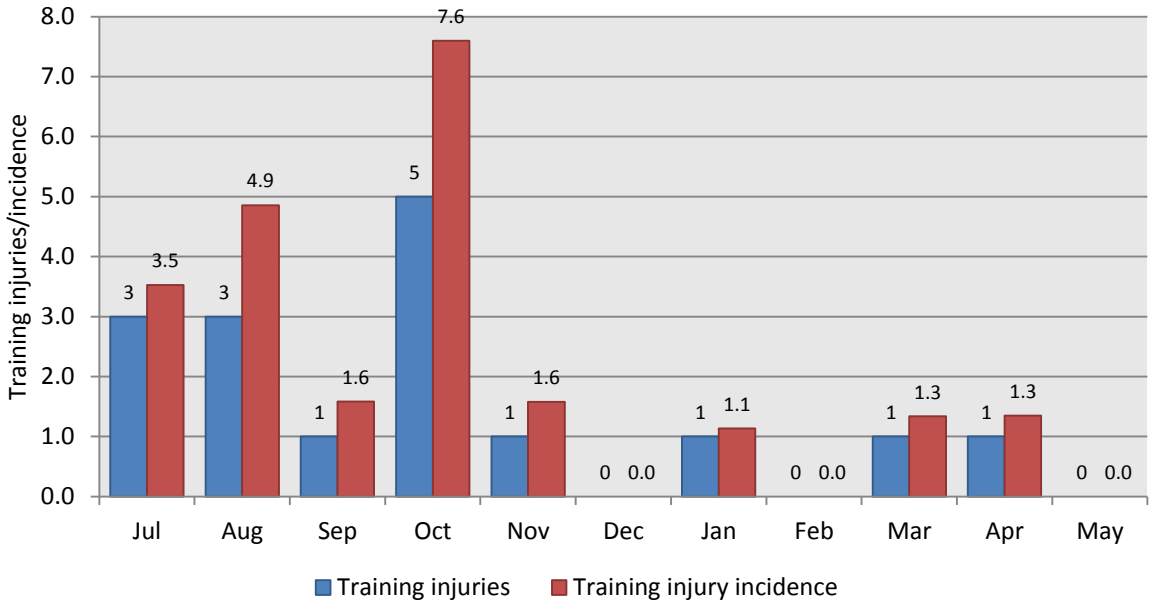


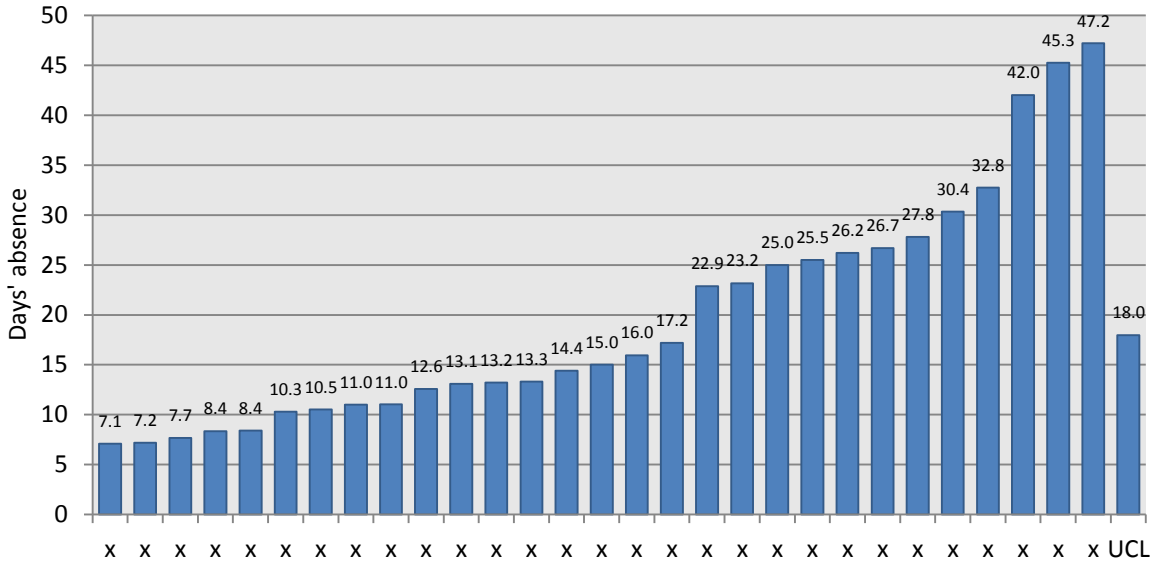
Figure 6. Monthly distribution of training injuries (blue bars) and training injury incidence (red bars) for **Team X** across the season



5.1.2 Days' absence for training injuries

The average absence for training injuries among the teams was 18 days, ranging from 7.1 to 47.2 days.

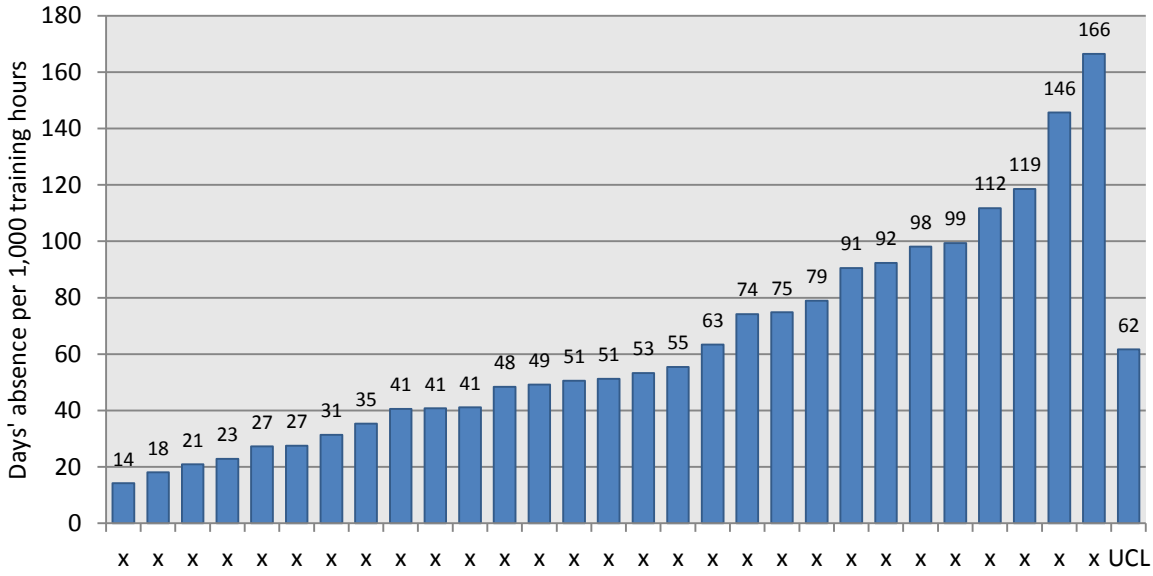
Figure 7. Days' absence for training injuries



5.1.3 Burden of training injuries

The mean injury burden in training was 62 days' absence/1,000 hours, ranging from 14 to 166.

Figure 8. Training injury burden



5.2 Match injury patterns

5.2.1 Incidence of match injuries

The mean match injury incidence for all teams was 23.2 injuries/1,000 match hours, ranging from 9.1 to 47.9.

Figure 9. Match injury incidence

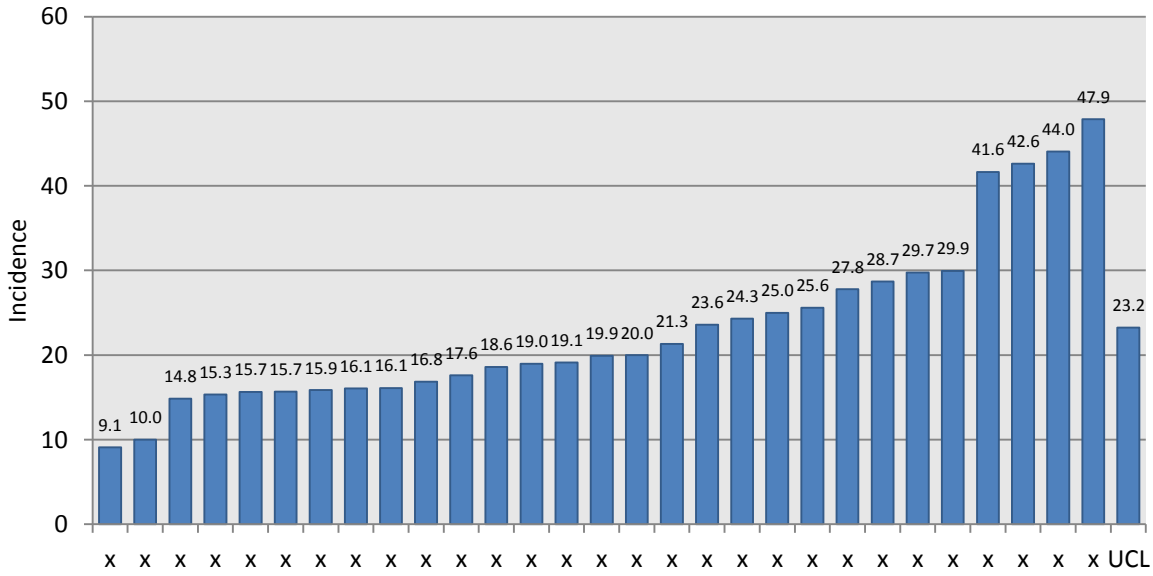
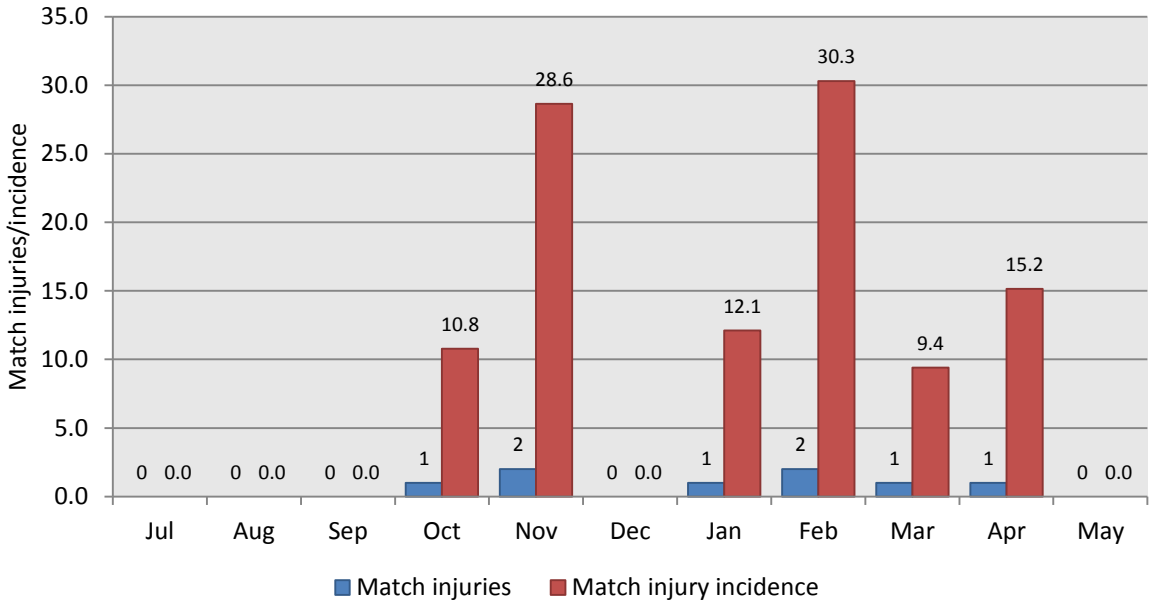


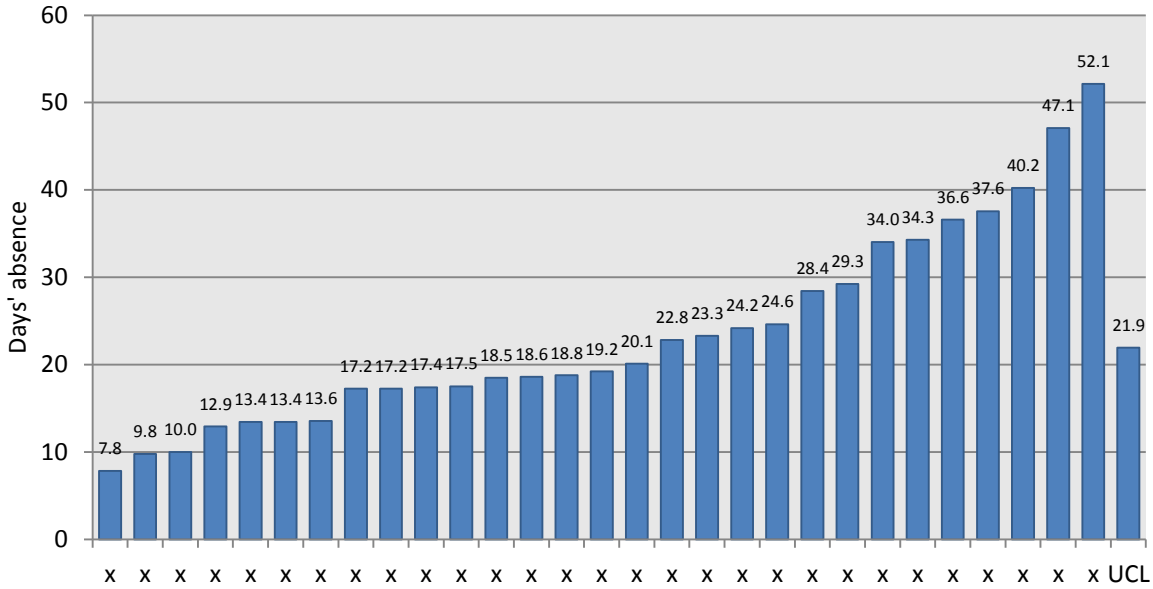
Figure 10. Monthly distribution of match injuries (blue bars) and match injury incidence (red bars) for **Team X** across the season



5.2.2 Days' absence for match injuries

The average absence for match injuries among the teams was 21.9 days, ranging from 7.8 to 52.1 days.

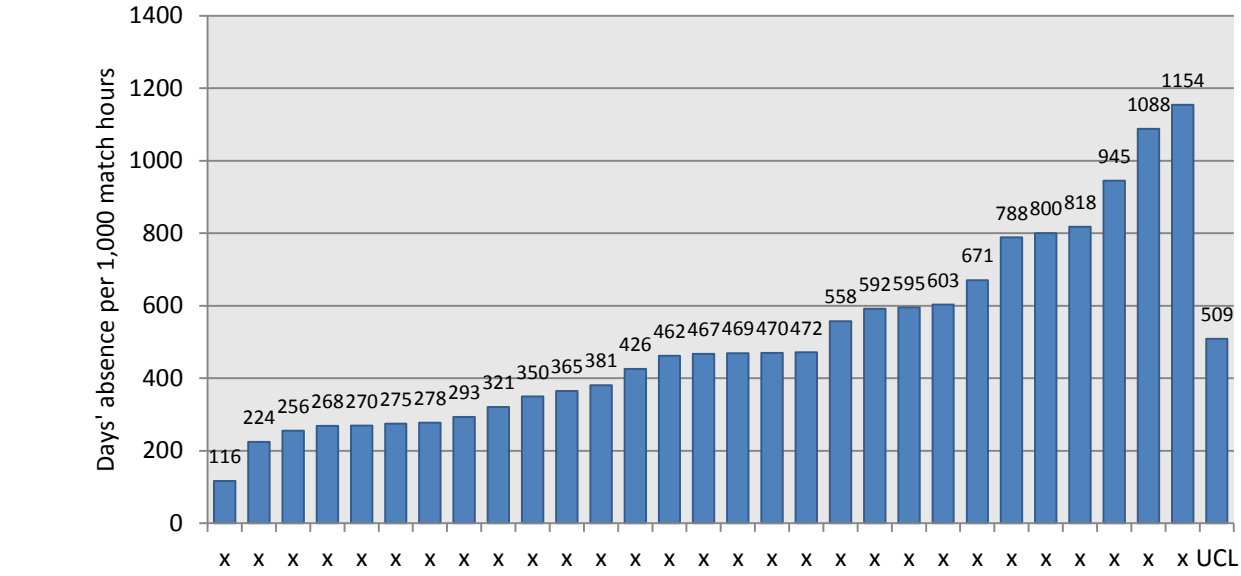
Figure 11. Days' absence for match injuries



5.2.3 Burden of match injuries

The mean injury burden in match play was 509 days' absence/1,000 hours, ranging from 116 to 1,154.

Figure 12. Match injury burden



5.3 Severe injury patterns

Injuries resulting in more than four weeks´ absence are classified as severe injuries.

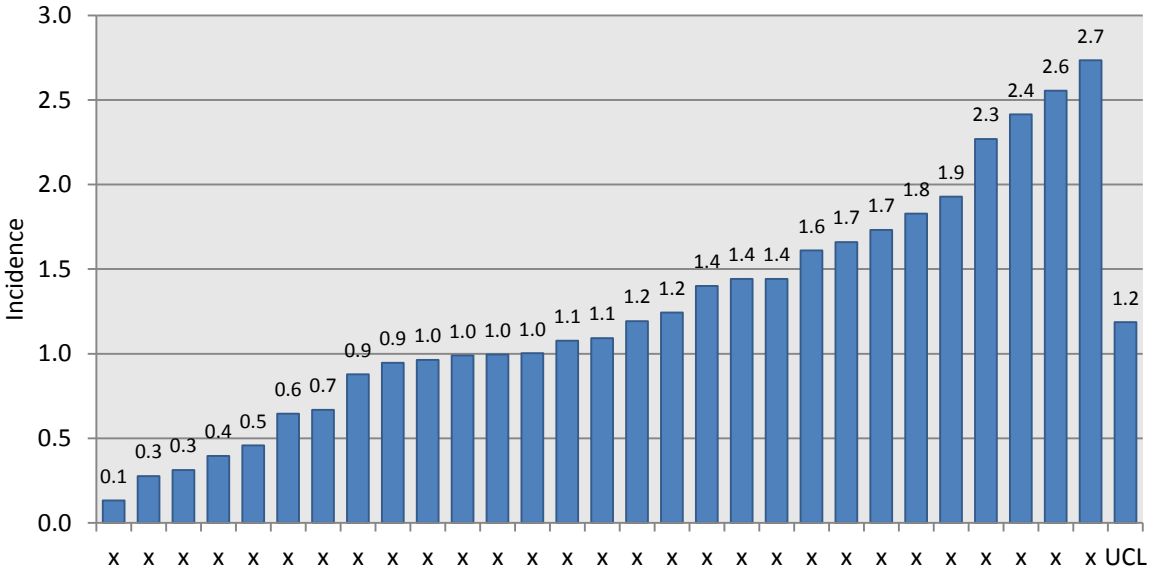
Table 10. Severe injury diagnoses

Diagnosis description	Team X		Other teams	
	N	%	N	%
[GTHS] Sportsman's hernia	1	12.5	1	0.4
[TMHB] Biceps femoris strain, grade 1–2	1	12.5	19	8.2
[KJMR] MCL rupture knee	1	12.5	4	1.7
[FJFX] Forefoot joint sprain (e.g. lesser toe MTP and IP joints)	1	12.5	0	0
[TMQS] Rectus femoris strain	4	50	13	5.6

5.3.1 Incidence of severe injuries

The injury incidence for all teams was 1.2 severe injuries/1,000 hours, ranging from 0.1 to 2.7.

Figure 13. Severe injury incidence



5.4 Muscle/tendon injury patterns

Table 11. Muscle/tendon injury diagnoses

Diagnosis description	Team X		Other teams	
	N	%	N	%
[TMAM] Adductor magnus strain	1	5.6	5	1
[FJPR] Plantar fascia rupture	1	5.6	0	0
[QMSX] Soleus Injury/strain	2	11.1	32	6.6
[TMAL] Adductor longus strain	3	16.7	44	9.1
[TMHB] Biceps femoris strain, grade 1–2	4	22.2	100	20.6
[TMQS] Rectus femoris strain	7	38.9	45	9.3
Total	**18**	**100**	**485**	**100**

Table 12. Mechanism of muscle/tendon injuries

	Total			
	Team X		Other teams	
	N	%	N	%
Running/sprinting	4	22.2	178	39.5
Twisting/turning	1	5.6	32	7.1
Shooting	9	50	62	13.7
Passing/crossing	0	0	36	8
Dribbling	1	5.6	3	0.7
Jumping/landing	0	0	17	3.8
Falling/diving	1	5.6	4	0.9
Stretching	0	0	33	7.3
Sliding	2	11.1	8	1.8
Overuse	0	0	43	9.5
Hit by ball	0	0	1	0.2
Collision	0	0	7	1.6
Heading	0	0	1	0.2
Tackled	0	0	5	1.1
Tackling	0	0	6	1.3
Kicked	0	0	3	0.7
Blocked	0	0	2	0.4
Other acute mechanism	0	0	10	2.2
Total	**18**	**100**	**451**	**100**

Table 13. Contact/non-contact muscle/tendon injuries

	Total			
	Team X		Other teams	
	N	%	N	%
Non-contact	18	100	453	93.6
Contact player	0	0	30	6.2
Contact object	0	0	1	0.2
Total	**18**	**100**	**484**	**100**

Table 14. Severity of muscle/tendon injuries

	Total			
	Team X		Other teams	
	N	%	N	%
Slight [0 days]	0	0	0	0
Minimal [1-3 days]	0	0	51	10.5
Mild [4-7 days]	1	5.6	120	24.7
Moderate [8-28 days]	12	66.7	243	50.1
Severe [>28 days]	5	27.8	71	14.6
Total	**18**	**100**	**485**	**100**

Table 15. Re-injury rate for muscle/tendon injuries

	Total			
	Team X		Other teams	
	N	%	N	%
No re-injury	18	100	444	91.5
Re-injury	0	0	39	8
Unknown	0	0	2	0.4
Total	**18**	**100**	**485**	**100**

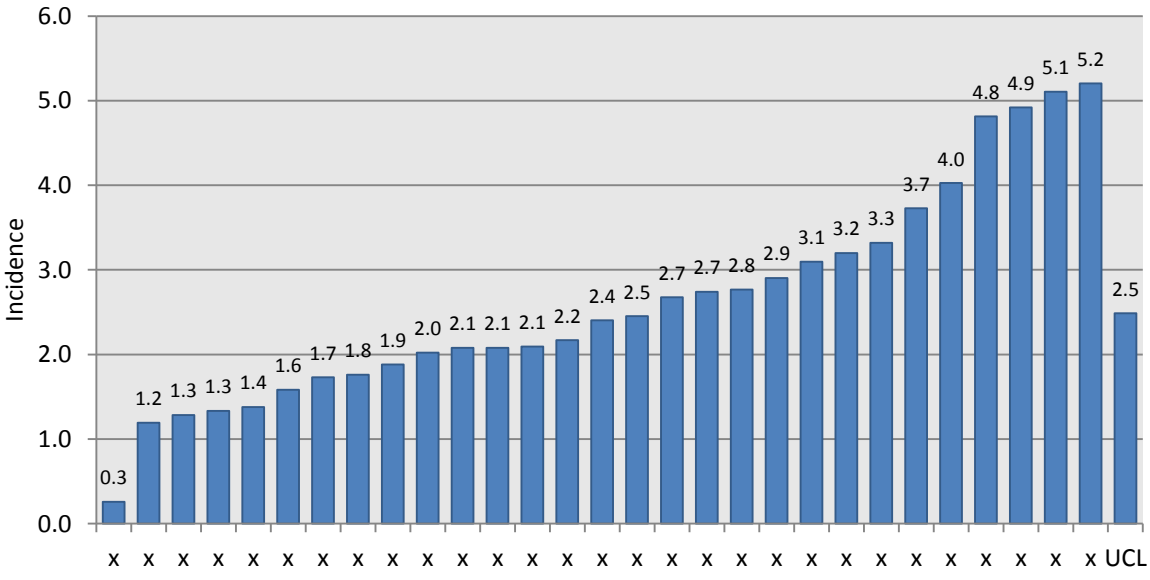
Table 16. Monthly distribution of muscle/tendon injuries

	Total			
	Team X		Other teams	
	N	%	N	%
July	3	16.7	31	6.4
August	2	11.1	44	9.1
September	1	5.6	62	12.8
October	4	22.2	63	13
November	3	16.7	48	9.9
December	0	0	54	11.1
January	2	11.1	39	8
February	2	11.1	35	7.2
March	1	5.6	61	12.6
April	0	0	34	7
May	0	0	14	2.9
June	0	0	0	0
Total	**18**	**100**	**485**	**100**

5.4.1 Incidence of muscle/tendon injuries

The incidence of muscle/tendon injuries for all teams was 2.5 injuries/1,000 hours, ranging from 0.3 to 5.2.

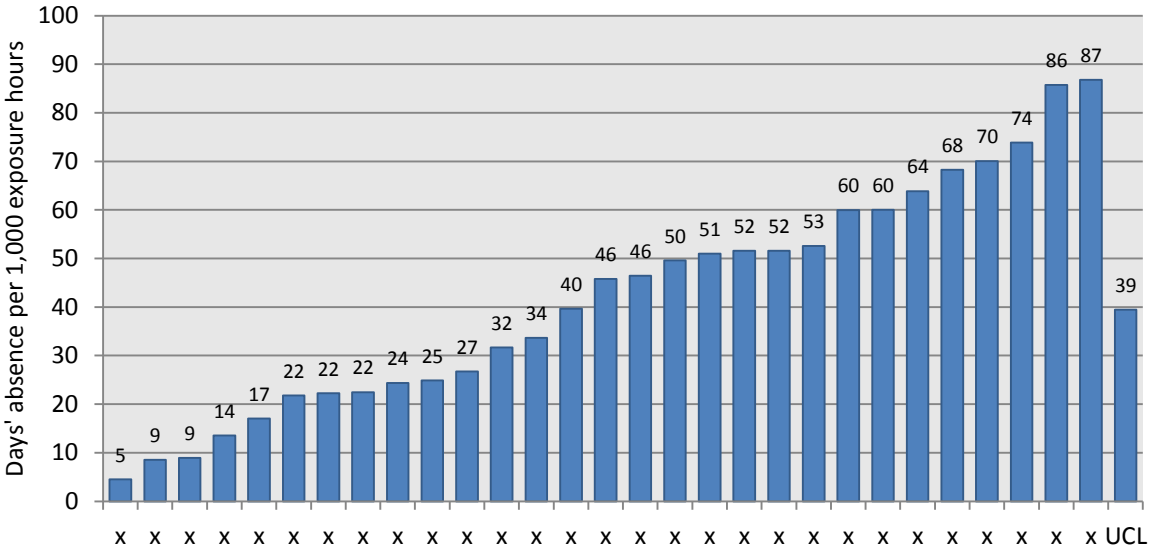
Figure 14. Muscle/tendon injury incidence



5.4.2 Burden of muscle/tendon injuries

The mean injury burden for muscle/tendon injuries was 39 days' absence/1,000 hours, ranging from 5 to 87.

Figure 15. Muscle/tendon injury burden



5.4.3 Days' absence for muscle/tendon injuries

Table 17. Days' absence for muscle/tendon injuries

Diagnosis description	Muscle/tendon injuries											
	Team X						Other teams					
	N	Sum	Mean	Med	Min	Max	N	Sum	Mean	Med	Min	Max
[TMAM] Adductor magnus strain	1	21	21	21	21	21	5	55	11	9	1	24
[FJPR] Plantar fascia rupture	1	8	8	8	8	8	0					
[QMSX] Soleus Injury/strain	2	36	18	18	12	24	32	638	19.9	19	2	43
[TMAL] Adductor longus strain	3	28	9.3	10	4	14	44	708	16.1	12	3	62
[TMHB] Biceps femoris strain, grade 1–2	4	86	21.5	18.5	17	32	100	1,955	19.6	15.5	2	99
[TMQS] Rectus femoris strain	7	249	35.6	31	14	85	45	976	21.7	18	4	97
Total	**18**	**428**	**23.8**	**20**	**4**	**85**	**485**	**7,553**	**15.6**	**11**	**1**	**101**

N = number of injuries within each category
Sum = total number of days lost because of injury (consequences for the team)
Mean= average number of days' absence per injury (expected recovery time)
Med = median days' absence for all injuries within the category (expected recovery time)
Min = shortest absence for an injury
Max = longest absence for an injury

5.5 Joint/ligament injury patterns

Table 18. Joint/ligament injury diagnoses

Diagnosis description	Team X		Other teams	
	N	%	N	%
[KJMR] MCL rupture knee	1	25	4	1.8
[FJFX] Forefoot joint sprain (i.e. lesser toe MTP and IP joints)	1	25	0	0
[KJLL] LCL strain/rupture	2	50	7	3.1
Total	**4**	**100**	**223**	**100**

Table 19. Mechanism of joint/ligament injuries

	Total			
	Team X		Other teams	
	N	%	N	%
Running/sprinting	0	0	5	2.3
Twisting/turning	0	0	36	16.4
Shooting	0	0	5	2.3
Passing/crossing	0	0	4	1.8
Dribbling	1	25	1	0.5
Jumping/landing	0	0	31	14.2
Falling/diving	0	0	12	5.5
Stretching	0	0	2	0.9
Sliding	0	0	5	2.3
Overuse	0	0	3	1.4
Hit by ball	0	0	7	3.2
Collision	0	0	13	5.9
Heading	0	0	1	0.5
Tackled	3	75	48	21.9
Tackling	0	0	11	5
Kicked	0	0	19	8.7
Blocked	0	0	9	4.1
Other acute mechanism	0	0	7	3.2
Total	**4**	**100**	**219**	**100**

Table 20. Contact/non-contact joint/ligament injuries

	Total			
	Team X		Other teams	
	N	%	N	%
Non-contact	1	25	88	39.5
Contact player	3	75	128	57.4
Contact object	0	0	7	3.1
Total	**4**	**100**	**223**	**100**

Table 21. Severity of joint/ligament injuries

	Total			
	Team X		Other teams	
	N	%	N	%
Slight [0 days]	0	0	0	0
Minimal [1-3 days]	0	0	33	14.8
Mild [4-7 days]	0	0	48	21.5
Moderate [8-28 days]	2	50	88	39.5
Severe [>28 days]	2	50	54	24.2
Total	**4**	**100**	**223**	**100**

Table 22. Re-injury rate for joint/ligament injuries

	Total			
	Team X		Other teams	
	N	%	N	%
No re-injury	3	75	210	94.2
Re-injury	1	25	12	5.4
Unknown	0	0	1	0.4
Total	**4**	**100**	**223**	**100**

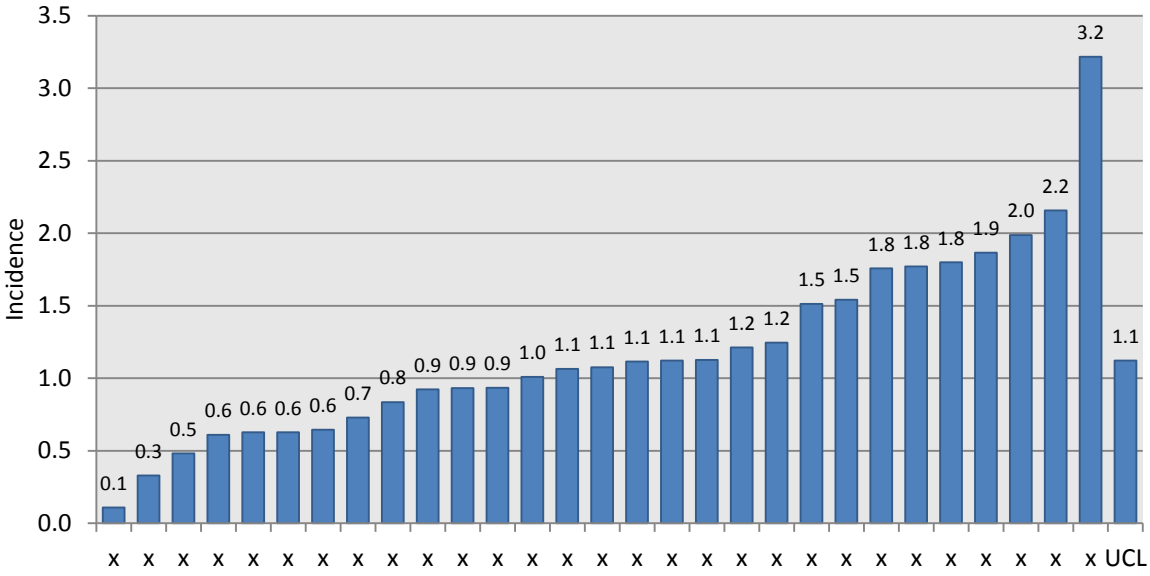
Table 23. Monthly distribution of joint/ligament injuries

	Total			
	Team X		Other teams	
	N	%	N	%
July	0	0	24	10.8
August	1	25	27	12.1
September	0	0	21	9.4
October	0	0	22	9.9
November	0	0	26	11.7
December	0	0	20	9
January	0	0	26	11.7
February	0	0	10	4.5
March	1	25	26	11.7
April	2	50	11	4.9
May	0	0	10	4.5
June	0	0	0	0
Total	**4**	**100**	**223**	**100**

5.5.1 Incidence of joint/ligament injuries

The mean incidence of joint/ligament injuries was 1.1 injury/1,000 hours, ranging from 0.1 to 3.2.

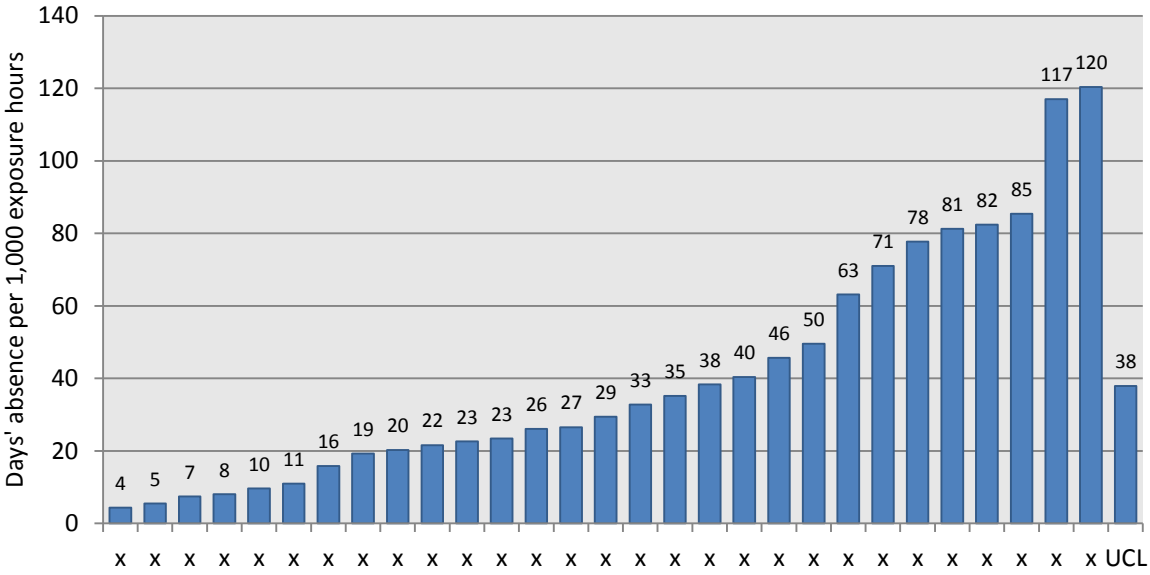
Figure 16. Joint/ligament injury incidence



5.5.2 Burden of joint/ligament injuries

The mean burden for joint/ligament injury was 38 days' absence/1,000 hours, ranging from 4 to 120.

Figure 17. Joint/ligament injury burden



5.5.3 Days' absence for joint/ligament injuries

Table 24. Days' absence for joint/ligament injuries

Diagnosis description	Joint/ligament injuries											
	Team X						Other teams					
	N	Sum	Mean	Med	Min	Max	N	Sum	Mean	Med	Min	Max
[KJMR] MCL rupture knee	1	62	62	62	62	62	4	301	75.3	75	57	94
[FJFX] Forefoot joint sprain	1	286	286	286	286	286	0					
[KJLL] LCL strain/rupture	2	31	15.5	15.5	15	16	7	96	13.7	13	1	32
Total	**4**	**379**	**94.8**	**39**	**15**	**286**	**223**	**7,289**	**32.7**	**13**	**1**	**270**

5.6 Re-injury patterns

Table 25. Re-injury diagnoses

Diagnosis description	Team X		Other teams	
	N	%	N	%
[KJLL] LCL strain/rupture	1	100	0	0
Total	**1**	**100**	**111**	**100**

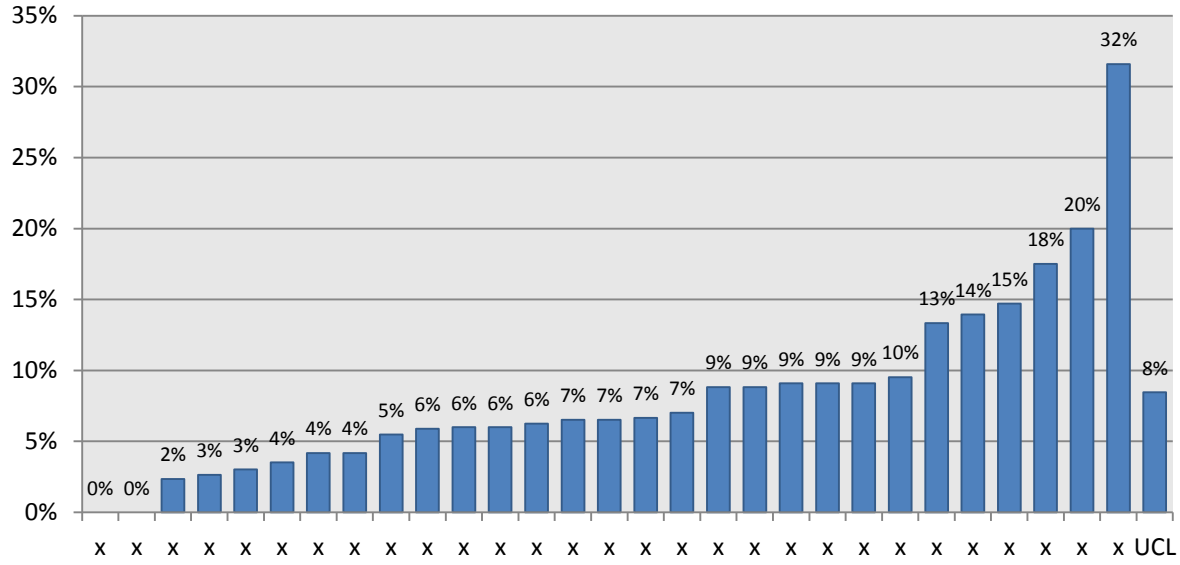
Table 26. Severity of re-injuries

	Total			
	Team X		Other teams	
	N	%	N	%
Slight [0 days]	0	0	0	0
Minimal [1-3 days]	0	0	17	15.3
Mild [4-7 days]	0	0	21	18.9
Moderate [8-28 days]	1	100	46	41.4
Severe [>28 days]	0	0	27	24.3
Total	**1**	**100**	**111**	**100**

5.6.1 Re-injury rate (%)

On average, 8% of injuries sustained were re-injuries, ranging from 0% to 32% at the various clubs.

Figure 18. Re-injury rate



6 Squad attendance/availability and absence

The data in all the tables of this section is shown in percentages.

6.1 Squad attendance/availability

Squad attendance/availability refers to the average percentage of players who participated in training sessions or were available for match selection over the season. An attendance/availability of 100% would mean that no player was absent because of injury (AT/AM), illness (IT/IM), national team duty (N) or other reason (O).

Figure 19. Squad attendance in training

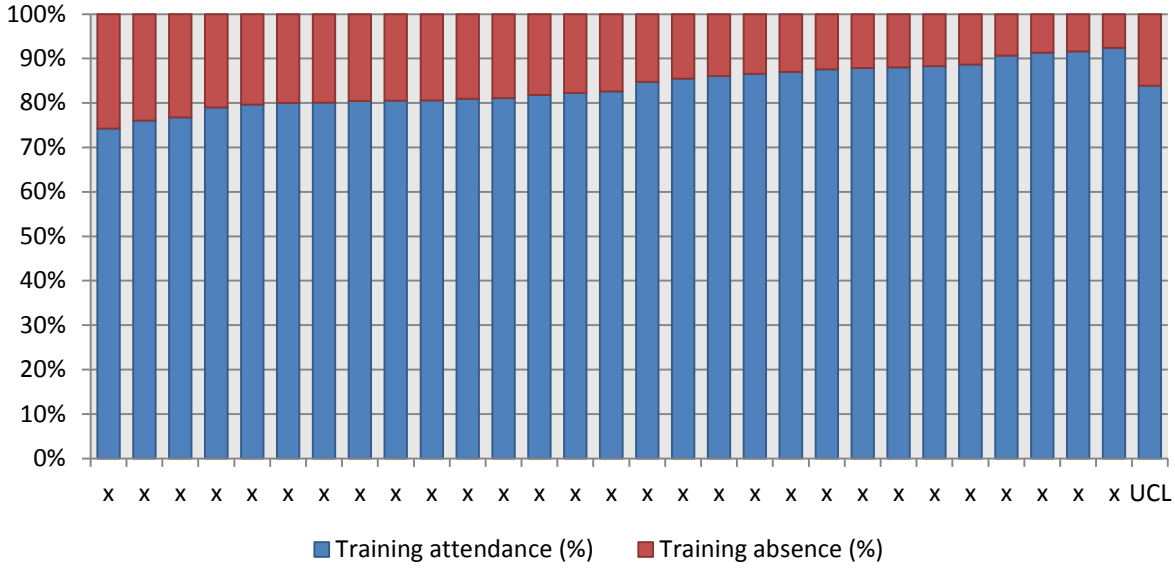


Figure 20. Squad availability for matches

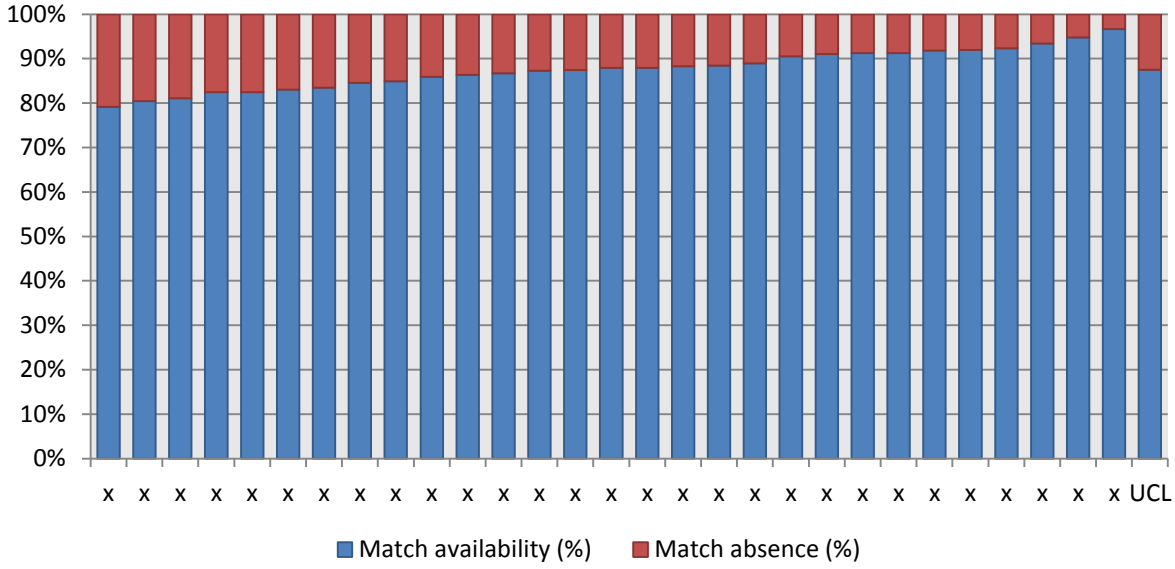
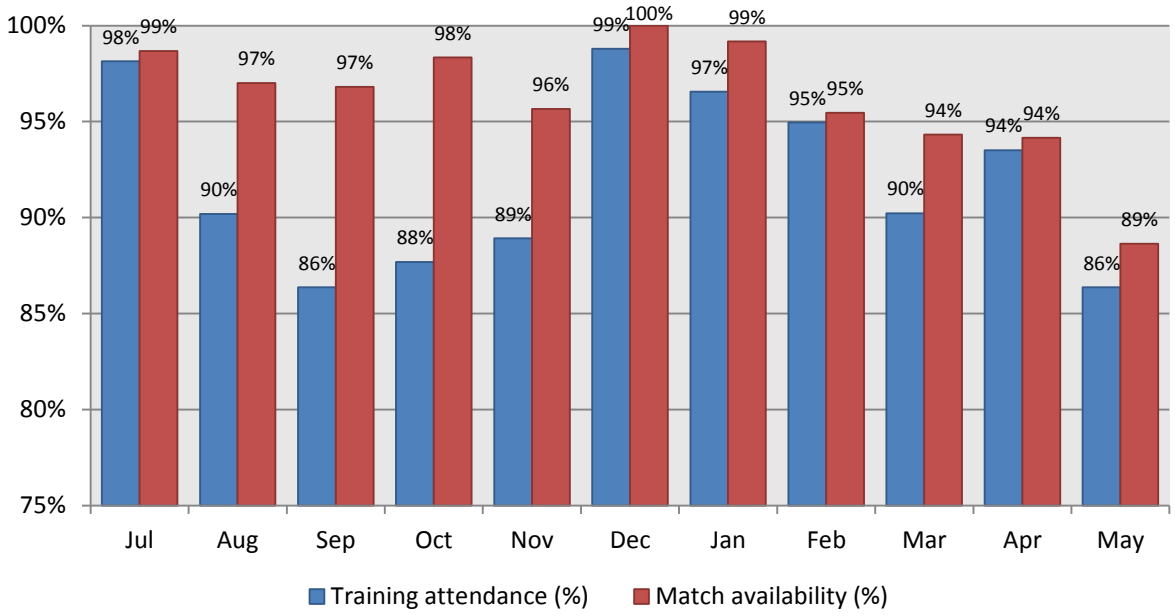


Figure 21. **Team X**'s overall squad attendance in training (blue bars) and availability for matches (red bars) over the season



6.2 Squad absence

The figures below illustrate the distribution of players' absence because of injury, illness, national team duty or other reason over the season.

Figure 22. Reasons for absence from training sessions

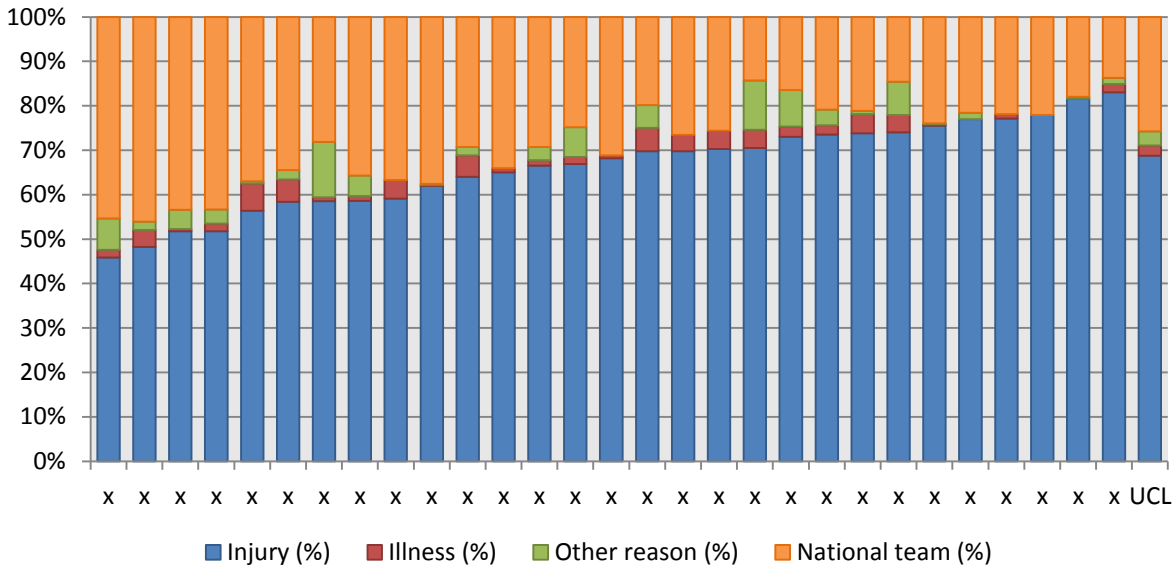
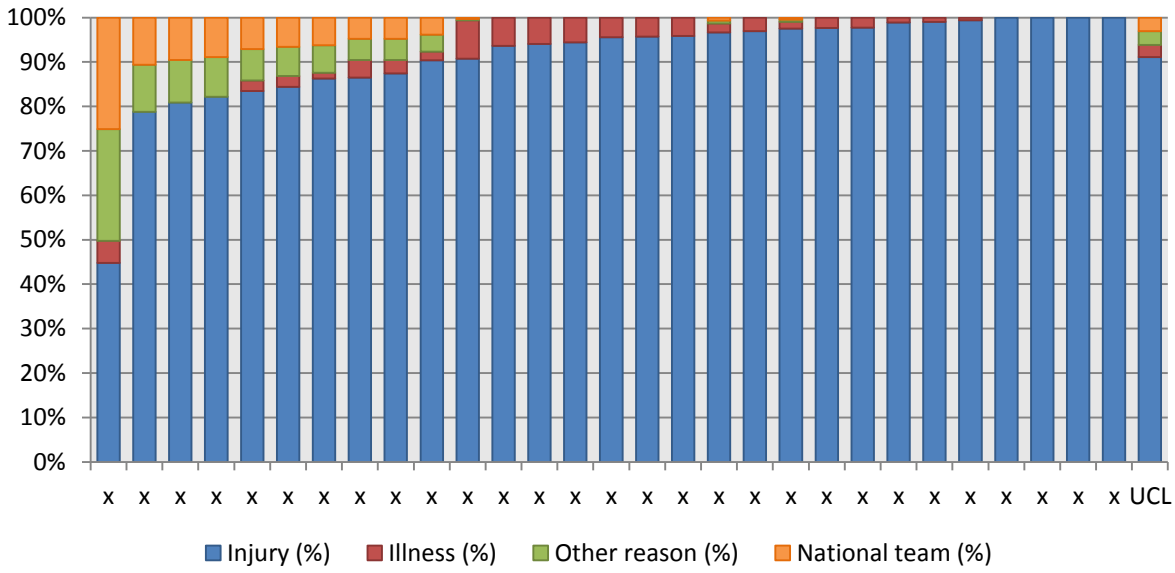


Figure 23. Reasons for absence from matches



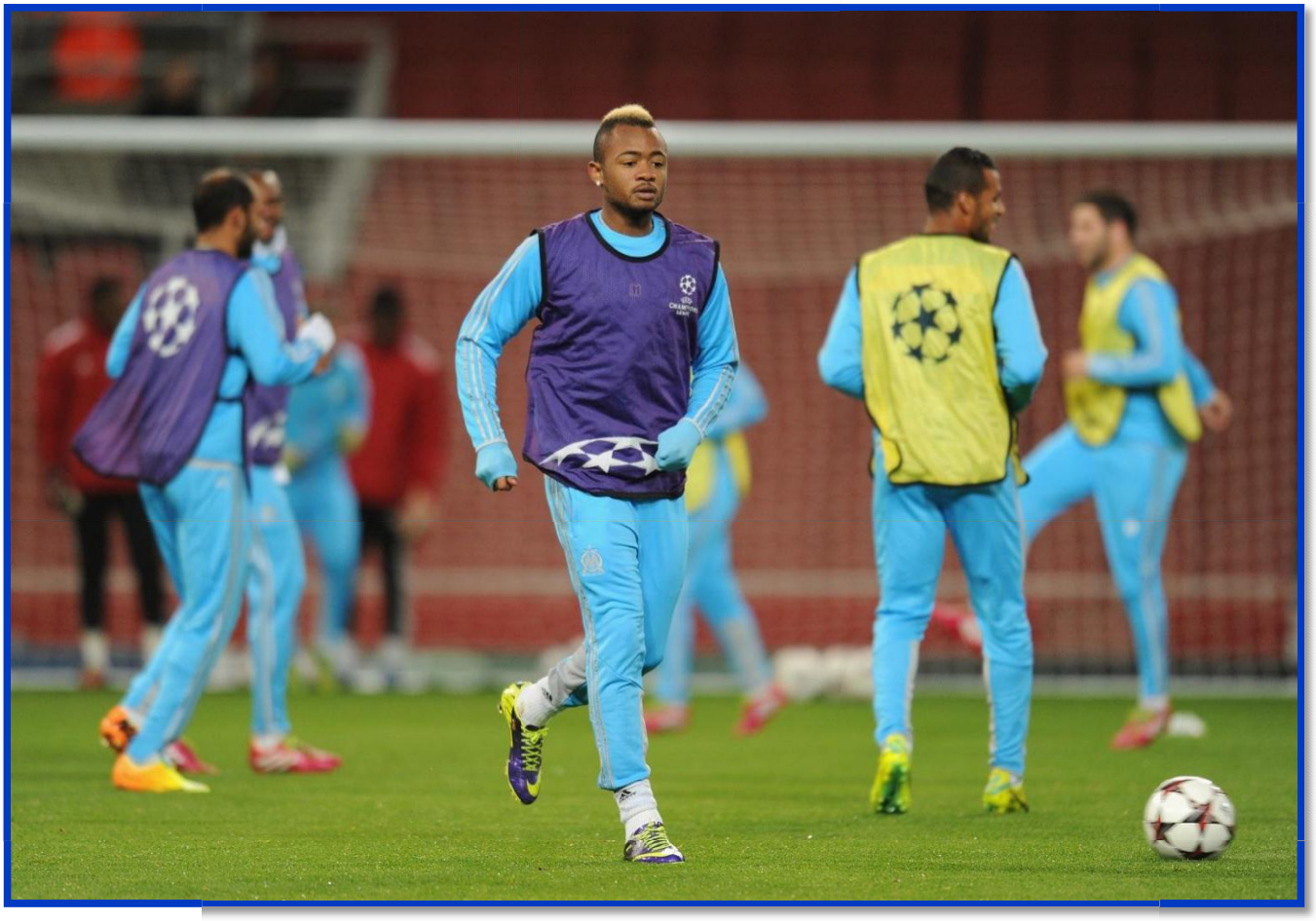


Figure 24. Reasons for absence from training sessions in **Team X** over the season

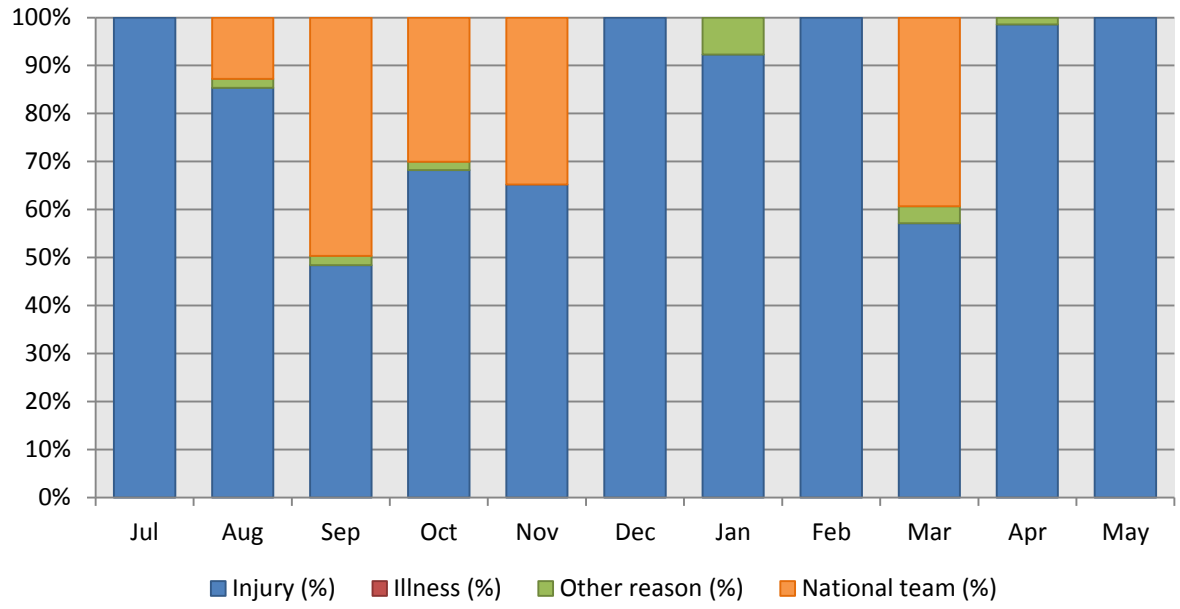
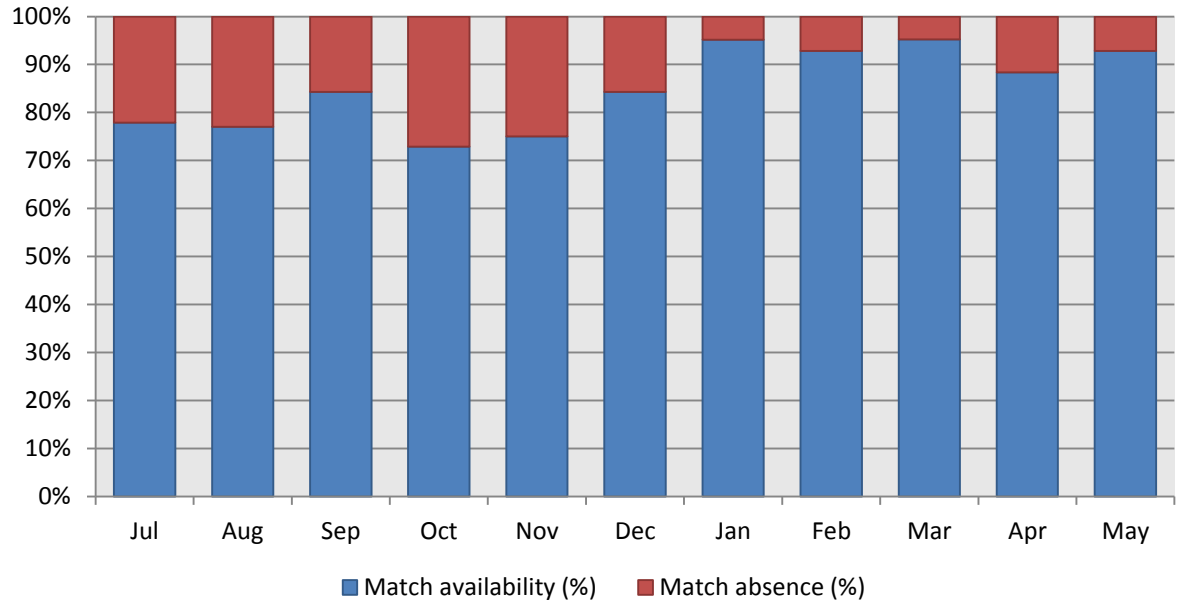


Figure 25. Reasons for absence from matches in **Team X** over the season



6.3 Number of training sessions/matches missed because of injury

The consequences of injury were also assessed in terms of the number of training sessions and matches that players missed during the season. On average, across all clubs, each player missed 2.2 training sessions and 0.6 matches each month because of injury. Data specific to each club is presented below.

Figure 26. Number of training sessions missed per player per month due to injury

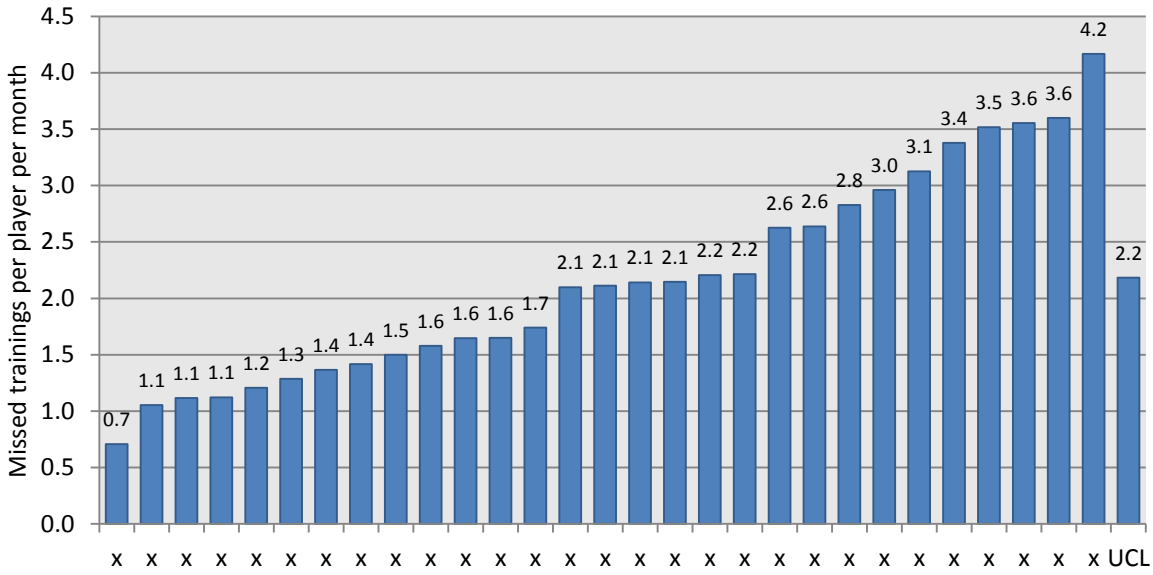
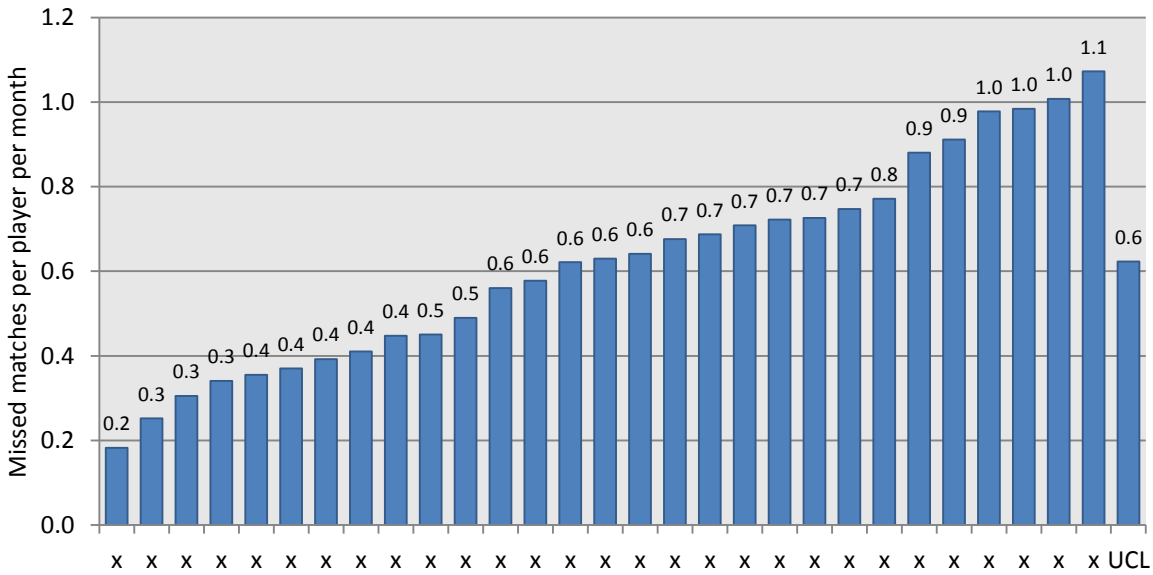


Figure 27. Number of matches missed per player per month due to injury



7 Analyses over 13 seasons

UEFA's injury study has now recorded approximately 10,000 injuries and 1,400,000 exposure hours over 13 seasons. A total of 37 teams from 12 different countries have participated at some point during these 13 seasons. This section contains results based on data from all seasons of the study.

7.1 Injury incidence over 13 seasons

Injury incidence each season is shown for team X (blue bars), together with the mean incidence for all teams (red line) for the purposes of comparison.

Figure 28. Training injury incidence [13 seasons]

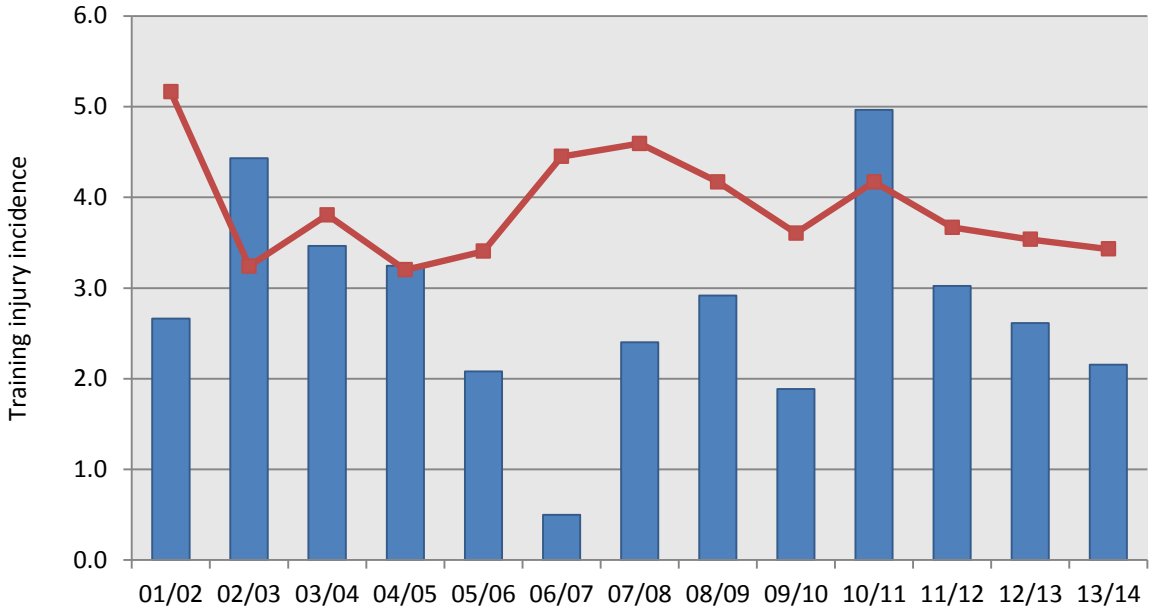


Figure 29. Match injury incidence [13 seasons]

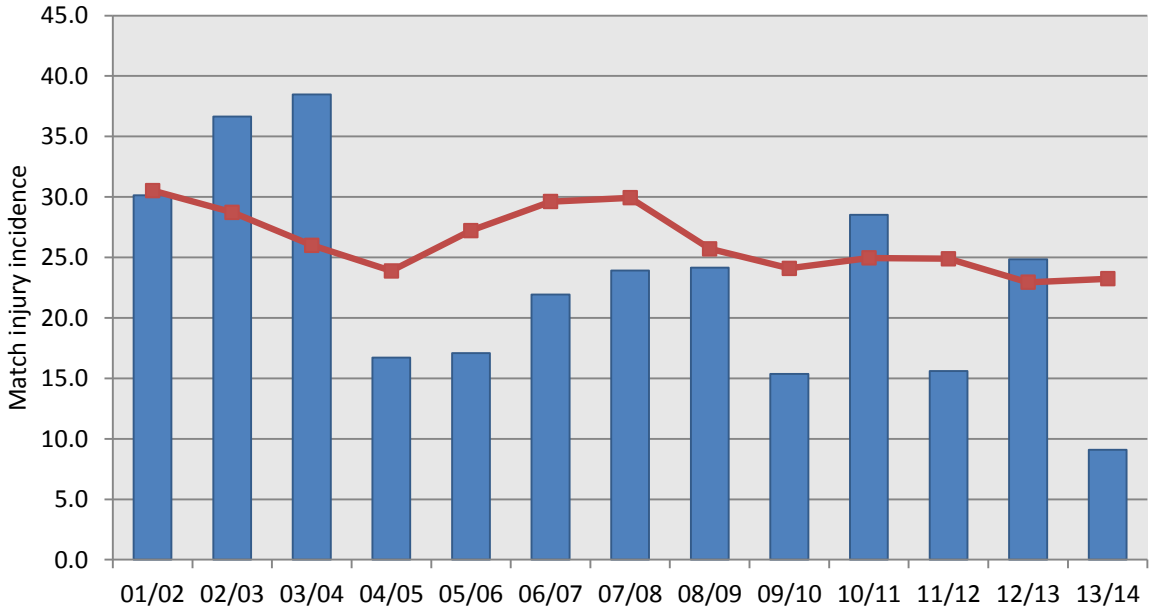


Figure 30. Total injury incidence [13 seasons]

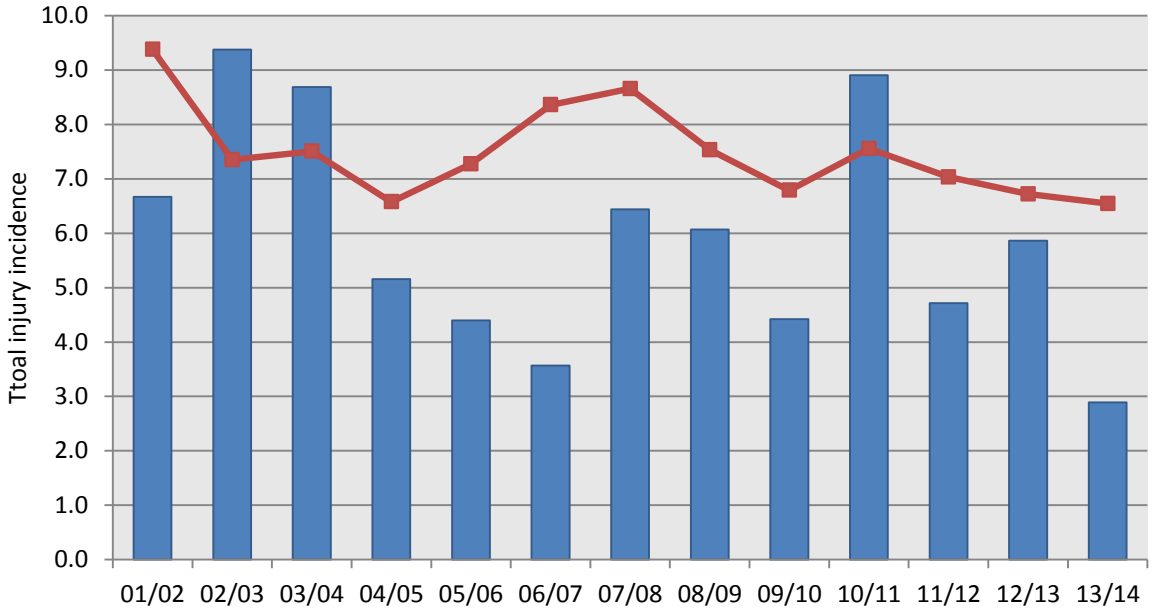


Figure 31. Severe injury incidence (>4 weeks' absence) [13 seasons]

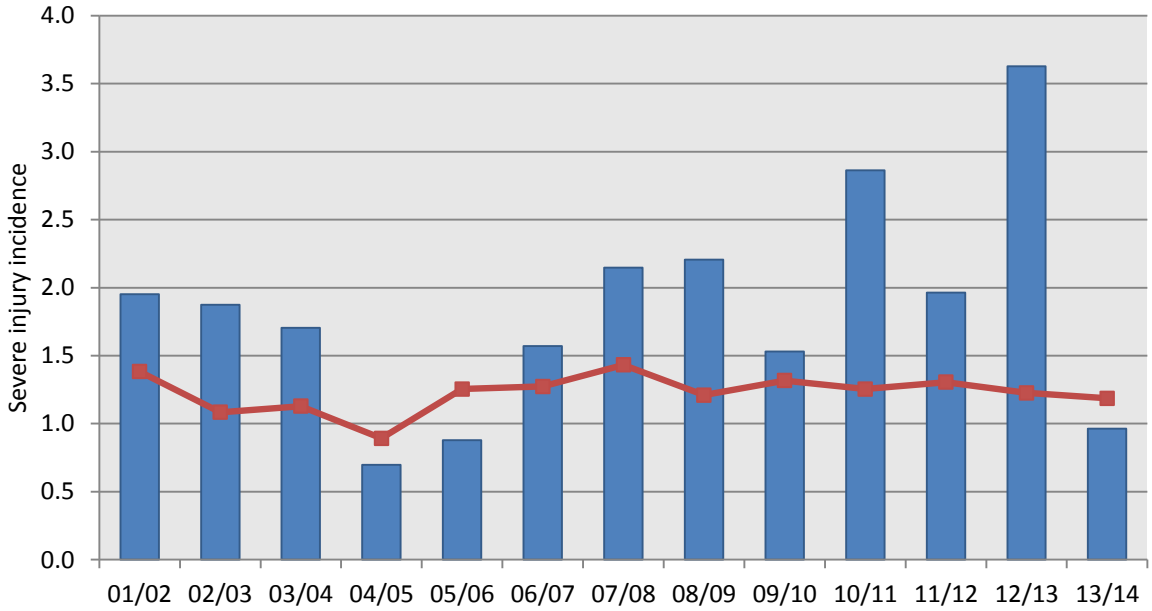


Figure 32. Muscle/tendon injury incidence [13 seasons]

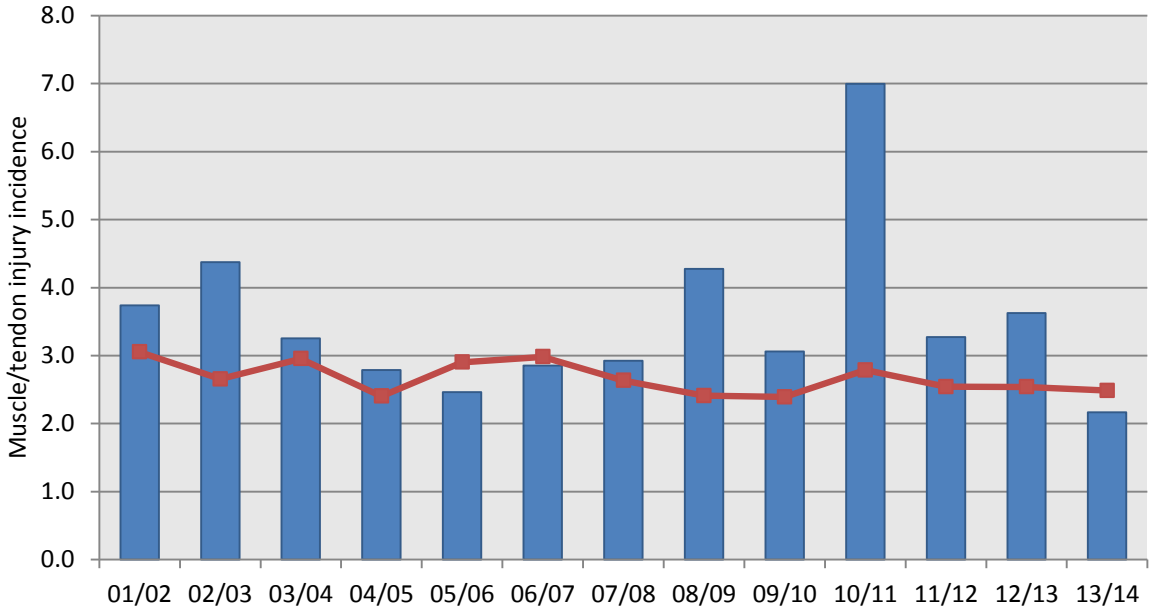


Figure 33. Joint/ligament injury incidence [13 seasons]

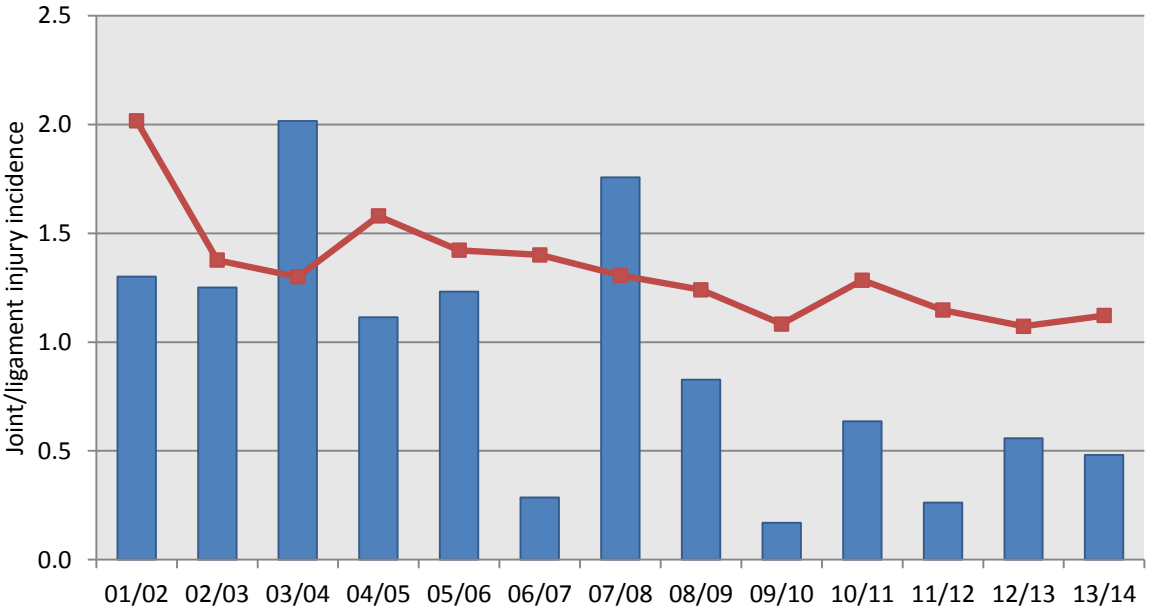


Figure 34. Re-injury rate [13 seasons]