

APPENDIX

Table A1. Number of colleges by sport and year

Year	Fall Sports							Winter Sports		Spring Sports	
	MSOC	MFB	MRUG	WSOC	WFH	WRUG	WVB	MBB	WBB	MLAX	WLAX
2008	3			4	3			6	6		
2009	6	2	3	6	3	3	1	6	6	6	6
2010	5	1	3	5	3	3	1	8	8	7	5
2011	4		2	4	3	2	1	4	4	7	5
2012										5	4

Collegiate Abbreviations: MSOC, men's soccer; MFB, men's football; MRUG, men's rugby; WSOC, women's soccer; WFH, women's field hockey; WRUG, women's rugby; WVB, women's volleyball; MBB, men's basketball; WBB, women's basketball; MLAX, men's lacrosse; WLAX, women's lacrosse

Table A2. Number of high schools by sport and year

Year	Fall Sports				Winter Sports		Spring Sports	
	BSOC	BFB	GSOC	GFH	BBB	GBB	BLAX	GLAX
2008	6		6	6	12	12		
2009	18	12	18	12	18	18	13	11
2010	18	11	17	11	18	18	14	12
2011	17	11	17	11	17	17	14	12
2012							14	12

High School Abbreviations: BSOC, boys' soccer; BFB, boys' football; GSOC, girls' soccer; GFH, girls' field hockey; BBB, boys' basketball; GBB, girls' basketball; BLAX, boys' lacrosse; GLAX, girls' lacrosse

Table A3. First-time noncontact ACL injury rate estimates based on Poisson regression results and corrected exposure days combined with comparison data from other studies

Sport	Estimated injury rate per 1000 person-days of exposure				Comparison rates per 1000 person-days of exposure	First author, Year published	Descriptive information
	Original	95% CI	Corrected	95% CI			
<b>Male college</b>							
Soccer	0.146	0.087-0.245	0.186	0.111-0.312	0.123* 0.13,* 0.120** 0.081* 0.04,* 0.04,** 0.11# 0.13,* 0.11,** 0.12# 0.09 0.12*	Harmon, 1998 <sup>14</sup> Arendt, 1999 <sup>3</sup> Gwinn, 2000 <sup>13</sup> Agel, 2005 <sup>1</sup> Mihata, 2006 <sup>25</sup> Hootman, 2007 <sup>17</sup> Prodromos, 2007 <sup>30</sup>	*overall for Divisions I, II, III *1989-1993, **1994-1998 *ACL tears requiring surgery only *noncontact, **contact, #overall *1989-1994, **1994-2004, #1989-2004 *weighted means for groups
Basketball	0.070	0.038-0.127	0.089	0.049-0.161	0.080* 0.07,* 0.101** 0.089* 0.04,* 0.02,** 0.08# 0.07,* 0.08,** 0.08# 0.07 0.08*	Harmon, 1998 <sup>14</sup> Arendt, 1999 <sup>3</sup> Gwinn, 2000 <sup>13</sup> Agel, 2005 <sup>1</sup> Mihata, 2006 <sup>25</sup> Hootman, 2007 <sup>17</sup> Prodromos, 2007 <sup>30</sup>	*overall for Divisions I, II, III *1989-1993, **1994-1998 *ACL tears requiring surgery only *noncontact, **contact, #overall *1989-1994, **1994-2004, #1989-2004 *weighted means for groups
Lacrosse	0.083	0.050-0.138	0.105	0.063-0.176	0.17 0.12 0.20 0.17*	Mihata, 2006 <sup>25</sup> Hootman, 2007 <sup>17</sup> Mountcastle, 2007 <sup>26</sup> Prodromos, 2007 <sup>30</sup>	*weighted means for groups
Football	0.139	0.071-0.273	0.177	0.090-0.348	0.36,* 0.03,** 0.83, # 0.05### 0.18 0.23 0.806,* 0.08,** 0.142#	Dick, 2007 <sup>5</sup> Hootman, 2007 <sup>17</sup> Mountcastle, 2007 <sup>26</sup> Dragoo, 2012 <sup>7</sup>	*noncontact/games, **noncontact/practices, #contact/games, ##contact/practices *games, **practices, #overall
Rugby	0.185	0.091-0.376	0.235	0.115-0.479	0.176* 0.18*	Gwinn, 2000 <sup>13</sup> Prodromos, 2007 <sup>30</sup>	*ACL tears requiring surgery only *weighted means for groups

Table A3. (continued)

Sport	Estimated injury rate per 1000 person-days of exposure				Comparison rates per 1000 person-days of exposure	First author, Year published	Descriptive information
<b>Female college</b>							
Soccer	0.307	0.195-0.482	0.391	0.249-0.614	0.321* 0.31,* 0.330** 0.768* 0.13,* 0.10,** 0.31# 0.31,* 0.32,** 0.32# 0.28 0.32* 0.057,* 0.189,** 0.199,# 0.340##  0.057,* 0.113,** 0.170,# 0.189##	Harmon, 1998 <sup>14</sup> Arendt, 1999 <sup>3</sup> Gwinn, 2000 <sup>13</sup> Agel, 2005 <sup>1</sup> Mihata, 2006 <sup>25</sup> Hootman, 2007 <sup>17</sup> Prodromos, 2007 <sup>30</sup> Gilchrist, 2008 <sup>9</sup>  (Gilchrist cont.)	*overall Divisions I, II, III *1989-1993, **1994-1998 *ACL tears requiring surgery only *noncontact, **contact, #overall *1989-1994, **1994-2004, #1989-2004  *weighted means for groups *noncontact w/conditioning, **noncontact control, #noncontact & contact w/conditioning, ##noncontact & contact control *first-time noncontact w/conditioning, **first-time noncontact control, #first-time noncontact & contact w/conditioning, ##first-time noncontact & contact control
Basketball	0.146	0.084-0.253	0.186	0.108-0.322	0.297* 0.29,* 0.289** 0.478* 0.16,* 0.06,** 0.27# 0.29,* 0.28,** 0.28# 0.23 0.39 0.29* 0.18 0.17 0.18*	Harmon, 1998 <sup>14</sup> Arendt, 1999 <sup>3</sup> Gwinn, 2000 <sup>13</sup> Agel, 2005 <sup>1</sup> Mihata, 2006 <sup>25</sup> Hootman, 2007 <sup>17</sup> Mountcastle, 2007 <sup>26</sup> Prodromos, 2007 <sup>30</sup>	*overall Divisions I, II, III *1989-1993, **1994-1998 *ACL tears requiring surgery only *noncontact, **contact, #overall *1989-1994, **1994-2004, #1989-2004  *weighted means for groups
Lacrosse	0.174	0.106-0.285	0.221	0.135-0.363	0.18 0.17 0.18*	Mihata, 2006 <sup>25</sup> Hootman, 2007 <sup>17</sup> Prodromos, 2007 <sup>30</sup>	*weighted means for groups
Field hockey	0.082	0.033-0.204	0.105	0.042-0.260	0.07	Hootman, 2007 <sup>17</sup>	
Rugby	0.387	0.197-0.759	0.493	0.251-0.967	0.36 0.354* 0.36*	Levy, 1997 <sup>21</sup> Gwinn, 2000 <sup>13</sup> Prodromos, 2007 <sup>30</sup>	*ACL tears requiring surgery only *weighted means for groups
Volleyball	0.447	0.063-3.173	0.569	0.080-4.041	0.09	Hootman, 2007 <sup>17</sup>	
<b>Male high school</b>							
Soccer	0.062	0.038-0.099	0.078	0.049-0.126	0.129,* 0.014,** 0.048# 0.050	Joseph, 2013 <sup>18</sup> Swenson, 2013 <sup>34</sup>	*competition, **practice, #overall
Basketball	0.029	0.016-0.053	0.037	0.021-0.067	0.07 0.02* 0.055,* 0.009,** 0.023# 0.024	Messina, 1999 <sup>24</sup> Prodromos, 2007 <sup>30</sup> Joseph, 2013 <sup>18</sup> Swenson, 2013 <sup>34</sup>	*weighted means for groups *competition, **practice, #overall
Lacrosse	0.035	0.020-0.594	0.044	0.026-0.076	0.079	Swenson, 2013 <sup>34</sup>	
Football	0.059	0.032-0.106	0.075	0.041-0.136	0.11* 0.467,* 0.041,** #0.111# 0.117	Prodromos, 2007 <sup>30</sup> Joseph, 2013 <sup>18</sup> Swenson, 2013 <sup>34</sup>	*weighted means for groups *competition, **practice, #overall
<b>Female high school</b>							
Soccer	0.129	0.087-0.192	0.164	0.111-0.244	0.09,* 0.49** —,* 0.107** *: 0.08,** 0.45# 0.352,* 0.024,** 0.122# 0.117	Mandelbaum, 2005 <sup>23</sup> Pfeiffer, 2006 <sup>28</sup>  Prodromos, 2007 <sup>30</sup> Joseph, 2013 <sup>18</sup> Swenson, 2013 <sup>34</sup>	*noncontact/PEP trained, **noncontact control *first-time noncontact/KLIP trained,**first-time noncontact control *weighted means for groups: **trained, #untrained *competition, **practice, #overall
Basketball	0.061	0.036-0.105	0.078	0.046-0.133	0.03 0.476,* 0.111** *: 0.45,** 0.10# 0.266,* 0.033,** 0.103# 0.107	Messina, 1999 <sup>11, 24, 30</sup> Pfeiffer, 2006 <sup>28</sup>  Prodromos, 2007 <sup>30</sup> Joseph, 2013 <sup>18</sup> Swenson, 2013 <sup>34</sup>	*first-time noncontact/KLIP trained, **first-time noncontact control *weighted means for groups: **trained, #untrained *competition, **practice, #overall
Lacrosse	0.073	0.044-0.121	0.093	0.056-0.154	0.078	Swenson, 2013 <sup>34</sup>	
Field hockey	0.035	0.014-0.095	0.044	0.018-0.108	0.031	Swenson, 2013 <sup>34</sup>	

**Figure A1.** SurveyMonkey Exposure Questionnaire  
(SurveyMonkey, Inc., Palo Alto, CA, USA; [www.surveymonkey.com](http://www.surveymonkey.com))

**Daily exposure log**

**1. Daily Exposure Log**

**\* 1. Date of event:**  
MM DD YYYY  
MM/DD/YYYY [ ] / [ ] / [ ]

**2. School:**  
College High School  
School [ ] [ ]

**\* 3. Sport**  
Sport [ ]

**\* 4. Sex**  
 Male  
 Female

**\* 5. Level**  
 Intercollegiate  
 Varsity (High School)  
 Junior Varsity (High School)

**\* 6. Event type**  
 Practice  
 Game

**\* 7. Number of players participating:**  
[ ]

**\* 8. My name is:**  
[ ]