

Supplementary Table 2. Study Quality

Cohort Details		Study Quality Measures								
		Cohort Selection and Measurement		Analysis	Outcome Measurement					
Study	Sport	Representativeness of exposed cohort (yes/no)	Exposure Measurement	Study results stratified by important factors (age or sex)	Outcome Ascertainment	Concussion defined	Mechanism of Injury	Study Follow-up	Previous History reported (yes/no)	Practice and game (yes/no)
Roberts et al (1999)	Hockey	Yes	AE	Yes	Trainer	No	Yes	4 tournaments	No	No
Emery et al (2006)	Hockey	Yes	PH	Yes	Trainer	Yes	Yes	1 season	Yes	Yes
Emery et al (2010)	Hockey	Yes	PH	Yes	Trainer	Yes	Yes	1 season	Yes	Yes
Emery et al (2011)	Hockey	Yes	PH	Yes	Trainer	Yes	Yes	1 season	Yes	Yes
DeLee et al (1992)	American football	Yes	Players	No	Trainer	No	No	1 season	No	Yes
Powell et al (1999)	American football, baseball, basketball, soccer/football, wrestling, field hockey, softball, volleyball	Yes	AE	Yes	Trainer	Yes	No	3 seasons	No	Yes
Zemper (2003)	American football	Yes	AE	No	Trainer	Yes	No	2 seasons	Yes	Yes
Meyers et al (2004)	American football	Yes	Team games	No	Trainer/physician	No	Yes	5 seasons	No	No
Schulz et al (2004)	American football, soccer/football, wrestling, basketball,	Yes	AE	Yes	Trainer	Yes	No	1-8 seasons	Yes	Yes

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	softball, baseball, cheerleading									
Couchman et al (2004)	American football	Yes	Player games	No	Physician	Yes	No	3 seasons	No	No
Gessel et al (2007)	American football, basketball, soccer/football, wrestling, baseball, softball	Yes	AE	Yes	Trainer	Yes	Yes	1 season	No	Yes
Lincoln et al (2011)	American football, lacrosse, soccer/football, wrestling, basketball, baseball, softball, field hockey, cheerleading	Yes	AE	Yes	Trainer	Yes	No	11 seasons	No	Yes
Kontos et al (2013)	American football	Yes	AE	Yes	Physician	Yes	Yes	1 season	Yes	Yes
Hinton et al (2005)	Lacrosse	Yes	AE	Yes	Trainer	No	Yes	3 seasons	No	Yes
Lincoln et al (2007)	Lacrosse	Yes	AE	Yes	Trainer	No	No	4 seasons	No	Yes
Gomez et al (1996)	Basketball	Yes	PH	No	Trainer	No	No	1 season	No	Yes
Messina et al (1999)	Basketball	Yes	PH	Yes	Trainer	No	No	1 season	No	Yes
McMahon et al (1993)	Aust. Rules football	Yes	PH	Yes	Study coordinator	No	No	1 season	No	Yes
McIntosh et al (2001)	Rugby	Yes	AE	No	Physician	No	Yes	1 season	No	No
Marshall et al (2001)	Rugby	Yes	AE	No	Trainer	No	No	3 seasons	No	No

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Junge et al (2004)	Rugby	Yes	PH	No	Physician	No	No	1 season	No	Yes
Haseler et al (2010)	Rugby	Yes	PH	Yes	Coach	Yes	No	1 season	No	No
Pieter et al (1999)	Taekwondo	Yes	AE	Yes	Physician	No	Yes	3 tourname nts	No	No

Abbreviations: AE = Athlete Exposures; PH = Player-hours