

**Appendix Table A1. Distribution of NFL Game Surface Types, 2012-2016 Regular Season Games**

Nominal descriptor of surface	Number of games over study period (2012-2016)
<b>Synthetic</b>	<b>555</b>
A-Turf Titan 50	37
AstroTurf Game Day 3D	39
FieldTurf Classic HD	136
FieldTurf Monofilament (Duraspine, Revolution, Revolution 360)	96
Hellas Matrix	40
Shaw Sports Turf Momentum	32
UBU Sports Speed Series S5-M	175
<b>Natural</b>	<b>725</b>
Bermudagrass <sup>a</sup>	426
Kentucky bluegrass <sup>b</sup>	151
Kikuyugrass <sup>c</sup>	1
Seashore Paspalum <sup>d</sup>	8
Hybrids (DD Grassmaster, StaLok, Reflex)	139
<b>Total Games</b>	<b>1280</b>

<sup>a</sup> Predominant species: *Cynodon dactylon* (L.) Pers. Var. *dactylon* x *C. transvaalensis* Burt-Davy

<sup>b</sup> Predominant species: *Poa pratensis* L.

<sup>c</sup> *Pennisetum clandestinum* Hochst ex Chiov

<sup>d</sup> *Paspalum Vaginatatum* Swartz

**Appendix Table A2. Additional Analyses, 2012-2016 Regular Season Games**

Injury Outcomes <sup>a,b</sup>	Main Results (as reported in Figure 1) <sup>c</sup>		Results for Additional Analyses		
	N	Unadjusted IRR (95% CI)	n	Unadjusted IRR (95% CI)	Absolute change in IRR
<b>EXCLUSION OF TYPE OF SYNTHETIC FIELD TURF: Removal of fields with potentially meaningful differences from other synthetic fields [Seattle and New England: monofilament rather than slit film fibers; Dallas: lower infill depth (22.0 mm) compared to others (40.5 mm average)]</b>					
Lower extremity					
Any time loss	4801	1.16 (1.10 – 1.23)	4351	1.19 (1.12 – 1.26)	0.03
≥8 days	1927	1.11 (1.01 – 1.21)	1752	1.13 (1.03 – 1.25)	0.02
Knee ankle foot					
Any time loss	3137	1.18 (1.10 – 1.26)	2826	1.19 (1.11 – 1.28)	0.01
≥8 days	1262	1.18 (1.06 – 1.32)	1135	1.19 (1.06 – 1.34)	0.01
<b>MECHANISM OF INJURY: Expand definition of “non-contact / surface contact” to include injuries reported as “contact - other” (i.e., non-player contact), or unknown contact type</b>					
Lower extremity					
Any time loss	1560	1.27 (1.15 – 1.41)	2355	1.29 (1.19 – 1.40)	0.02
≥8 days	691	1.20 (1.04 – 1.40)	882	1.23 (1.07 – 1.40)	0.03
Knee ankle foot					
Any time loss	745	1.56 (1.35 – 1.80)	1289	1.47 (1.31 – 1.63)	0.09
≥8 days	295	1.67 (1.33 – 2.11)	416	1.59 (1.31 – 1.93)	0.08
<b>MECHANISM OF INJURY: Examination of injuries reported as due to “player-contact” only</b>					
Lower extremity					
Any time loss	n/a	n/a	2446	1.06 (0.97 – 1.14)	n/a
≥8 days	n/a	n/a	1045	1.01 (0.90 – 1.15)	n/a
Knee ankle foot					
Any time loss	n/a	n/a	1848	1.01 (0.92 – 1.11)	n/a
≥8 days	n/a	n/a	846	1.02 (0.89 – 1.17)	n/a

<sup>a</sup>Any time loss' includes injuries that resulted in any amount of missed participation time in a NFL practice or game.

<sup>b</sup>'≥8 days' includes injuries that required a player to miss 8 or more days of participation in football activities, approximating at least one missed NFL game.

<sup>c</sup>Results as presented in Figure 1 for main study analyses for comparison to sensitivity analysis results.