

## Supplementary File 5.

**Table 1.** Women's elite football injury surveillance studies: overall, match, & training injury incidence rates (per 1,000 hours of exposure).

	Overall	Match	Training
Ibikunle et al (2019)	19.17 (14.40 to 23.94)	55.56 (36.60 to 74.51)	10.98 (6.99 to 14.98)
Babwah (2014)		27.60 (17.00 to 38.20)*	
Nilstad et al (2014): self-reported		18.60 (14.70 to 22.50)*	3.70 (3.00 to 4.30)*
Nilstad et al (2014): medical staff		5.40 (3.80 to 7.00)*	2.20 (1.50 to 2.80)*
Ekstrand et al (2011): grass	5.79 (4.28 to 7.29)	12.51 (8.53 to 16.49)	2.79 (1.54 to 4.04)
Ekstrand et al (2011): artificial turf	4.30 (3.65 to 4.96)	14.88 (11.32 to 18.45)	2.92 (2.33 to 3.48)
Gaulrapp et al (2010)	3.26 (2.85 to 3.67)	18.49 (15.58 to 21.40)	1.36 (1.08 to 1.64)
Hägglund et al (2009)	5.52 (4.90 to 6.15)	16.13 (13.29 to 18.97)	3.77 (3.21 to 4.32)
Tegnander et al (2008)	6.17 (5.29 to 7.05)	24.30 (19.35 to 29.34)	3.71 (2.98 to 4.44)
Jacobson & Tegner (2007)	4.45 (3.89 to 5.03)	13.90 (11.37 to 16.43)	2.70 (2.06 to 3.34)
Faude et al (2005)	6.80 (5.94 to 7.66)		

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using a **time-loss definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).

\* Studies not included in the meta-analysis due to data required for statistical aggregation (e.g., number of injuries; total of exposure hours; standard error) not being reported or calculable.

**Table 2a.** Women's elite football injury surveillance studies: overall injury incidence rates (per 1,000 hours of exposure) stratified by location of injury.

	Head & Neck	Upper Limbs	Trunk	Lower Limbs
Ibikunle et al (2019)				
Babwah (2014)				
Nilstad et al (2014): self-reported				
Nilstad et al (2014): medical staff				
Ekstrand et al (2011): grass	0.61 (0.12 to 1.10)	0.30 (-0.04 to 0.65)	0.20 (-0.08 to 0.48)	4.67 (3.32 to 6.02)
Ekstrand et al (2011): artificial turf	0.29 (-0.37 to 0.95)	0.16 (-0.33 to 0.64)	0.13 (-0.32 to 0.57)	3.71 (1.33 to 6.09)
Gaulrapp et al (2010)				
Hägglund et al (2009)	0.22 (-0.47 to 0.91)	0.11 (-0.38 to 0.60)	0.50 (-0.54 to 1.53)	5.13 (1.82 to 8.45)
Tegnander et al (2008)	0.46 (0.22 to 0.70)	0.29 (0.10 to 0.49)	0.42 (0.19 to 0.66)	5.00 (4.21 to 5.79)
Jacobson & Tegner (2007)		0.08 (0.00 to 0.15)		3.65 (3.14 to 4.16)
Faude et al (2005)	0.45 (0.23 to 0.67)	0.37 (0.17 to 0.57)	0.51 (0.27 to 0.74)	5.47 (4.70 to 6.24)

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using a **time-loss definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).

**Table 2b.** Women's elite football injury surveillance studies: match injury incidence rates (per 1,000 hours of exposure) stratified by location of injury.

	Head & Neck	Upper Limbs	Trunk	Lower Limbs
Ibikunle et al (2019)				
Babwah (2014)				
Nilstad et al (2014): self-reported				
Nilstad et al (2014): medical staff				
Ekstrand et al (2011): grass	1.32 (0.03 to 2.61)	0.33 (-0.32 to 0.97)	1.11 (0.14 to 2.08)	10.86 (7.16 to 14.57)
Ekstrand et al (2011): artificial turf	0.89 (0.02 to 1.76)	0.22 (-0.21 to 0.66)	0.00	12.44 (9.18 to 15.70)
Gaulrapp et al (2010)				
Hägglund et al (2009)				
Tegnander et al (2008)				
Jacobson & Tegner (2007)		0.24 (-0.09 to 0.57)		11.26 (8.99 to 13.54)
Faude et al (2005)				

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using a **time-loss definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).

**Table 2c.** Women's elite football injury surveillance studies: training injury incidence rates (per 1,000 hours of exposure) stratified by location of injury.

	Head & Neck	Upper Limbs	Trunk	Lower Limbs
Ibikunle et al (2019)				
Babwah (2014)				
Nilstad et al (2014): self-reported				
Nilstad et al (2014): medical staff				
Ekstrand et al (2011): grass	0.29 (-0.11 to 0.70)	0.29 (-0.11 to 0.70)	0.29 (-0.11 to 0.70)	1.91 (0.87 to 2.95)
Ekstrand et al (2011): artificial turf	0.21 (0.05 to 0.36)	0.15 (0.02 to 0.28)	0.00	2.55 (2.00 to 3.09)
Gaulrapp et al (2010)				
Hägglund et al (2009)				
Tegnander et al (2008)				
Jacobson & Tegner (2007)		0.04 (-0.02 to 0.11)		2.23 (1.79 to 2.67)
Faude et al (2005)				

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using a **time-loss definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).

**Table 3a.** Women's elite football injury surveillance studies: overall injury incidence rates (per 1,000 hours of exposure) stratified by type of injury.

	Fracture & Bone Stress	Joint & Ligaments	Muscle & Tendon	Contusion	Laceration & Skin Lesion	CNS/PNS	Other Injuries
Ibikunle et al (2019)	2.47 (0.76 to 4.19)	6.80 (3.96 to 9.65)	8.08 (4.95 to 11.13)	0.00	1.24 (0.02 to 2.45)	0.31 (-0.30 to 0.92)	0.31 (-0.30 to 0.92)
Babwah (2014)							
Nilstad et al (2014): self-reported							
Nilstad et al (2014): medical staff							
Ekstrand et al (2011): grass	0.20 (-0.08 to 0.48)	1.62 (0.83 to 2.42)	2.03 (1.14 to 2.92)	1.22 (0.53 to 1.91)	0.00	0.41 (0.01 to 0.80)	0.30 (-0.04 to 0.65)
Ekstrand et al (2011): artificial turf	0.20 (-0.34 to 0.71)	1.76 (0.12 to 0.34)	1.30 (-0.11 to 2.70)	0.70 (-0.33 to 1.73)	0.03 (-0.17 to 0.22)	0.18 (-0.34 to 0.71)	0.13 (-0.32 to 0.57)
Gaulrapp et al (2010)							
Hägglund et al (2009)							
Tegnander et al (2008)							
Jacobson & Tegner (2007)							
Faude et al (2005)							

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using a **time-loss definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).

**Table 3b.** Women's elite football injury surveillance studies: match injury incidence rates (per 1,000 hours of exposure) stratified by type of injury.

	Fracture & Bone Stress	Joint & Ligaments	Muscle & Tendon	Contusion	Laceration & Skin Lesion	CNS/PNS	Other Injuries
Ibikunle et al (2019)							
Babwah (2014)							
Nilstad et al (2014): self-reported							
Nilstad et al (2013): medical staff							
Ekstrand et al (2011): grass	0.33 (-0.32 to 0.97)	4.94 (2.44 to 7.44)	2.96 (1.03 to 4.90)	3.23 (1.25 to 5.33)	0.00	0.99 (-0.13 to 2.10)	0.00
Ekstrand et al (2011): artificial turf	0.00	5.55 (3.38 to 7.73)	3.55 (1.81 to 5.30)	3.55 (1.81 to 5.30)	0.22 (-0.21 to 0.66)	0.89 (0.49 to 1.29)	0.89 (0.49 to 1.29)
Gaulrapp et al (2010)							
Häggglund et al (2009)							
Tegnander et al (2008)							
Jacobson & Tegner (2007)							
Faude et al (2005)							

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using a **time-loss definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).

**Table 3c.** Women's elite football injury surveillance studies: training injury incidence rates (per 1,000 hours of exposure) stratified by type of injury.

	Fracture & Bone Stress	Joint & Ligaments	Muscle & Tendon	Contusion	Laceration & Skin Lesion	CNS/PNS	Other Injuries
Ibikunle et al (2019)							
Babwah (2014)							
Nilstad et al (2014): self-reported							
Nilstad et al (2013): medical staff							
Ekstrand et al (2011): grass	0.15 (-0.14 to 0.43)	0.15 (-0.14 to 0.43)	1.62 (0.66 to 2.57)	0.29 (-0.11 to 0.70)	0.00	0.15 (-0.14 to 0.43)	0.44 (-0.06 to 0.94)
Ekstrand et al (2011): artificial turf	0.21 (0.05 to 0.36)	1.26 (0.89 to 1.64)	1.00 (0.66 to 1.33)	0.32 (0.13 to 0.51)	0.00	0.09 (-0.01 to 0.19)	0.03 (-0.03 to 0.09)
Gaulrapp et al (2010)							
Häggglund et al (2009)							
Tegnander et al (2008)							
Jacobson & Tegner (2007)							
Faude et al (2005)							

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using a **time-loss definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).

**Table 4a.** Women's elite football injury surveillance studies: overall injury incidence rates (per 1,000 hours of exposure) stratified by severity of injury.

	Slight (<1 day)	Minimal (1-3 days)	Mild (4-7 days)	Moderate (8-28 days)	Severe (>28 days)
Ibikunle et al (2019)					
Babwah (2014)					
Nilstad et al (2014): self-reported					
Nilstad et al (2013): medical staff					
Ekstrand et al (2011): grass	0.00	1.83 (0.98 to 2.67)	1.42 (0.68 to 2.17)	1.62 (0.83 to 2.42)	0.91 (0.31 to 1.51)
Ekstrand et al (2011): artificial turf	0.03 (-0.02 to 0.08)	1.27 (0.92 to 1.63)	1.25 (0.89 to 1.60)	1.27 (0.92 to 1.63)	0.49 (0.27 to 0.71)
Gaulrapp et al (2010)					
Häggglund et al (2009)		1.40 (1.09 to 1.72)	1.55 (1.22 to 1.88)	1.88 (1.52 to 2.25)	0.68 (0.46 to 0.90)
Tegnander et al (2008)					
Jacobson & Tegner (2007)		0.77 (0.54 to 1.01)	0.98 (0.71 to 1.24)	1.73 (1.38 to 2.08)	0.98 (0.71 to 1.24)
Faude et al (2005)					

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using a **time-loss definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).



**Table 4b.** Women's elite football injury surveillance studies: match injury incidence rates (per 1,000 hours of exposure) stratified by severity of injury.

	Slight (<1 day)	Minimal (1-3 days)	Mild (4-7 days)	Moderate (8-28 days)	Severe (>28 days)
Ibikunle et al (2019)					
Babwah (2014)					
Nilstad et al (2014): self-reported					
Nilstad et al (2013): medical staff					
Ekstrand et al (2011): grass	0.00	3.95 (1.72 to 6.18)	2.63 (0.81 to 4.46)	2.96 (1.03 to 4.90)	2.96 (1.03 to 4.90)
Ekstrand et al (2011): artificial turf	0.00	4.89 (2.84 to 6.93)	4.00 (2.15 to 5.85)	4.44 (2.50 to 6.39)	1.55 (0.40 to 2.71)
Gaulrapp et al (2010)					
Hägglund et al (2009)					
Tegnander et al (2008)					
Jacobson & Tegner (2007)					
Faude et al (2005)					

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using a **time-loss definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).

**Table 4c.** Women's elite football injury surveillance studies: training injury incidence rates (per 1,000 hours of exposure) stratified by severity of injury.

	Slight (<1 day)	Minimal (1-3 days)	Mild (4-7 days)	Moderate (8-28 days)	Severe (>28 days)
Ibikunle et al (2019)					
Babwah (2014)					
Nilstad et al (2014): self-reported					
Nilstad et al (2013): medical staff					
Ekstrand et al (2011): grass	0.00	0.88 (0.18 to 1.59)	0.88 (0.18 to 1.59)	1.03 (0.27 to 1.79)	0.00
Ekstrand et al (2011): artificial turf	0.03 (-0.03 to 0.08)	0.79 (0.49 to 1.09)	0.88 (0.57 to 1.20)	0.85 (0.54 to 1.16)	0.35 (0.15 to 0.55)
Gaulrapp et al (2010)					
Häggglund et al (2009)					
Tegnander et al (2008)					
Jacobson & Tegner (2007)					
Faude et al (2005)					

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using a **time-loss definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).

**Table 5.** Women's international football injury surveillance studies: overall, match, & training injury incidence rates (per 1,000 hours of exposure).

	Overall	Match	Training
Hägglund et al (2009) U-19 European Championship 2006	13.47 (7.97 to 18.98)	28.17 (13.41 to 42.92)	7.44 (2.58 to 12.30)
Hägglund et al (2009) U-19 European Championship 2007	8.53 (3.70 to 13.35)	21.96 (8.98 to 34.93)	1.10 (-1.06 to 3.27)
Hägglund et al (2009) U-19 European Championship 2008	4.89 (1.50 to 8.28)	11.67 (2.33 to 21.01)	1.78 (-0.69 to 4.26)
Junge et al (2004) World Cup 1999			
Junge & Dvorak (2007) World Cup 2003			
Junge et al (2004) Olympic Games 2000			
Junge et al (2006) Olympic Games 2004			
Junge & Dvorak (2007) U-19 World Championship 2002			
Junge & Dvorak (2007) U-19 World Championship 2004			
Junge & Dvorak (2007) U-20 World Championship 2006			
Waldén (2007) European Championship 2005	9.88 (5.32 to 14.45)	29.59 (14.61 to 44.56)	2.28 (-0.30 to 4.87)

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using a **time-loss definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).

**Table 6.** Women's international football injury surveillance studies: overall, match, & training injury incidence rates (per 1,000 hours of exposure).

	Overall	Match	Training
Hägglund et al (2009) U-19 European Championship 2006			
Hägglund et al (2009) U-19 European Championship 2007			
Hägglund et al (2009) U-19 European Championship 2008			
Junge et al (2004) World Cup 1999		38.70 (24.83 to 52.49)	
Junge & Dvorak (2007) World Cup 2003		52.00 (38.00 to 66.00)	
Junge et al (2004) Olympic Games 2000		64.64 (42.25 to 87.05)	
Junge et al (2006) Olympic Games 2004		70.00 (50.00 to 90.00)	
Junge & Dvorak (2007) U-19 World Championship 2002		85.00 (65.00 to 105.00)	
Junge & Dvorak (2007) U-19 World Championship 2004		68.00 (50.00 to 85.00)	
Junge & Dvorak (2007) U-20 World Championship 2006		89.00 (71.00 to 107.00)	
Waldén (2007) European Championship 2005			

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using an **all physical complaints definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).

**Table 7.** Women's international football injury surveillance studies: match injury incidence rates (per 1,000 hours of exposure) stratified by location of injury.

	Head & Neck	Upper Limbs	Trunk	Lower Limbs
Hägglund et al (2009) U-19 European Championship 2006				
Hägglund et al (2009) U-19 European Championship 2007				
Hägglund et al (2009) U-19 European Championship 2008				
Junge et al (2004) World Cup 1999				
Junge & Dvorak (2007) World Cup 2003				
Junge et al (2004) Olympic Games 2000	16.16 (4.96 to 27.36)	6.06 (-0.80 to 12.92)	2.02 (-1.94 to 5.98)	34.34 (18.02 to 50.67)
Junge et al (2006) Olympic Games 2004	10.88 (-1.68 to 23.44)	4.66 (-0.61 to 9.94)	6.22 (0.12 to 12.31)	48.17 (31.22 to 65.13)
Junge & Dvorak (2007) U-19 World Championship 2002				
Junge & Dvorak (2007) U-19 World Championship 2004				
Junge & Dvorak (2007) U-20 World Championship 2006				
Waldén (2007) European Championship 2005				

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using an **all physical complaints definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).

**Table 8.** Women's international football injury surveillance studies: match injury incidence rates (per 1,000 hours of exposure) stratified by type of injury.

	Fracture & Bone Stress	Joint & Ligaments	Muscle & Tendon	Contusion	Laceration & Skin Lesion	CNS/PNS	Other Injuries
Hägglund et al (2009) U-19 European Championship 2006							
Hägglund et al (2009) U-19 European Championship 2007							
Hägglund et al (2009) U-19 European Championship 2008							
Junge et al (2004) World Cup 1999							
Junge & Dvorak (2007) World Cup 2003							
Junge et al (2004) Olympic Games 2000	0.00	8.08 (0.16 to 16.00)	16.16 (4.96 to 27.36)	4.04 (-1.56 to 9.64)	8.08 (0.16 to 16.00)	4.04 (-1.56 to 9.64)	0.00
Junge et al (2006) Olympic Games 2004	1.55 (-1.49 to 4.60)	23.31 (11.51 to 35.11)	6.21 (0.12 to 12.31)	24.85 (12.68 to 27.05)	0.00	3.11 (1.20 to 7.42)	10.87 (2.82 to 18.94)
Junge & Dvorak (2007) U-19 World Championship 2002							
Junge & Dvorak (2007) U-19 World Championship 2004							
Junge & Dvorak (2007) U-20 World Championship 2006							
Waldén (2007) European Championship 2005							

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using an **all physical complaints definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).

**Table 9.** Women's international football injury surveillance studies: overall injury incidence rates (per 1,000 hours of exposure) stratified by severity of injury.

	Slight (<1 day)	Minimal (1-3 days)	Mild (4-7 days)	Moderate (8-28 days)	Severe (>28 days)
Hägglund et al (2009) U-19 European Championship 2006	2.34 (0.05 to 4.64)	7.62 (3.48 to 11.76)	1.17 (-0.45 to 2.80)	1.17 (-0.45 to 2.80)	1.17 (-0.45 to 2.80)
Hägglund et al (2009) U-19 European Championship 2007	0.00	4.98 (1.29 to 8.66)	0.71 (-0.68 to 2.10)	2.13 (-0.27 to 4.55)	0.71 (-0.68 to 2.10)
Hägglund et al (2009) U-19 European Championship 2008	0.00	3.06 (0.38 to 5.74)	0.00	1.22 (0.47 to 2.92)	0.61 (-0.59 to 1.81)
Junge et al (2004) World Cup 1999					
Junge & Dvorak (2007) World Cup 2003					
Junge et al (2004) Olympic Games 2000					
Junge et al (2006) Olympic Games 2004					
Junge & Dvorak (2007) U-19 World Championship 2002					
Junge & Dvorak (2007) U-19 World Championship 2004					
Junge & Dvorak (2007) U-20 World Championship 2006					
Waldén (2007) European Championship 2005	1.65 (-0.22 to 3.51)	4.39 (1.35 to 7.44)	0.00	2.20 (-2.11 to 6.50)	1.65 (-0.22 to 3.51)

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using a **time-loss definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).

**Table 10.** Women's international football injury surveillance studies: match injury incidence rates (per 1,000 hours of exposure) stratified by severity of injury.

	Slight (<1 day)	Minimal (1-3 days)	Mild (4-7 days)	Moderate (8-28 days)	Severe (>28 days)
Hägglund et al (2009) U-19 European Championship 2006					
Hägglund et al (2009) U-19 European Championship 2007					
Hägglund et al (2009) U-19 European Championship 2008					
Junge et al (2004) World Cup 1999					
Junge & Dvorak (2007) World Cup 2003					
Junge et al (2004) Olympic Games 2000	34.34 (18.02 to 50.67)	12.12 (2.42 to 21.82)	4.04 (-1.56 to 9.64)	8.08 (0.16 to 16.00)	0.00
Junge et al (2006) Olympic Games 2004	32.63 (18.68 to 46.59)	15.54 (5.91 to 25.18)	7.77 (0.96 to 14.58)	4.66 (-0.61 to 9.94)	1.55 (-1.49 to 4.60)
Junge & Dvorak (2007) U-19 World Championship 2002					
Junge & Dvorak (2007) U-19 World Championship 2004					
Junge & Dvorak (2007) U-20 World Championship 2006					
Waldén (2007) European Championship 2005					

Values are IIR (95% CI).

Footnote: these data relate to the quantification of injury incidence rates using an **all physical complaints definition of injury**; blank cells indicate that these data were not reported or were not calculable (based upon reported data in the article).