**Supplemental Table 1:** Rates of individual injures (combined weighted average moderate and severe) per 10,000 miles (mean ± SEM)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **All Runners** | **Female** | **Male** | **All** |
| **FFS** | **RFS** | **P-value** | **FFS** | **RFS** | **P-value** | **FFS** | **RFS** | **P-value** |
| Traumatic muscle strain (all muscles) | 1.37 ± 0.40 | 2.06 ± 1.19 | 1.36 ± 0.81 | 0.63 | 0.81 ± 0.32 | 1.70 ± 0.82 | 0.71 | 1.09 ± 0.38 | 1.51 ± 0.57 | 0.54 |
| Tibial stress injury – MTSS | 1.37 ± 0.32 | 1.37 ± 2.32 | 1.97 ± 0.57 | 0.80 | 0.40 ± 0.47 | 1.51 ± 0.37 | 0.06 | 0.63 ± 0.62 | 1.77 ± 0.35 | 0.11 |
| Knee pain | 0.77 ± 0.25 | 0 ± 0 | 0.91 ± 0.51 | 0.07 | 0.61 ± 0.25 | 0.34 ± 0.94 | 0.54 | 0.47 ± 0.20 | 0.93 ± 0.35 | 0.26 |
| Repetitive muscle strain | 0.77 ± 0.23 | 0.69 ± 1.16 | 1.21 ± 0.41 | 0.67 | 0.20 ± 0.38 | 0.76 ± 0.39 | 0.31 | 0.31 ± 0.38 | 1.01 ± 0.28 | 0.14 |
| Iliotibial band syndrome | 0.71 ± 0.26 | 1.37 ± 1.12 | 1.06 ± 0.61 | 0.81 | 0.20 ± 0.11 | 0.57 ± 0.34 | 0.31 | 0.47 ± 0.28 | 0.84 ± 0.26 | 0.42 |
| Tendinopathy – Achilles | 0.66 ± 0.20 | 1.37 ± 0.43 | 0.30 ± 0.15 | **0.0185** | 0.40 ± 0.26 | 1.13 ± 0.58 | 0.25 | 0.63 ± 0.24 | 0.67 ± 0.28 | 0.90 |
| Plantar fasciitis  | 0.55 ± 0.15 | 0 ± 0 | 1.06 ± 0.29 | **0.0003** | 0.40 ± 0.25 | 0.19 ± 0.21 | 0.51 | 0.31 ± 0.19 | 0.67 ± 0.20 | 0.19 |
| Stress fracture – metatarsal | 0.49 ± 0.16 | 1.37 ± 1.06 | 0.61 ± 0.29 | 0.48 | 0.61 ± 0.32 | 0 ± 0 | 0.06 | 0.78 ± 0.34 | 0.34 ± 0.16 | 0.24 |
| Foot Pain | 0.44 ± 0.20 | 0 ± 0 | 0.61 ± 0.48 | 0.21 | 0.61 ± 0.30 | 0.19 ± 0.17 | 0.22 | 0.47 ± 0.24 | 0.42 ± 0.27 | 0.89 |
| Hip pain | 0.38 ± 0.20 | 0 ± 0 | 0.91 ± 0.51 | 0.07 | 0 ± 0 | 0.19 ± 0.15 | 0.20 | 0 ± 0 | 0.59 ± 0.29 | **0.0401** |
| Lower back pain | 0.33 ± 0.17 | 0 ± 0 | 0.30 ± 0.26 | 0.25 | 0.20 ± 0.25 | 0.57 ± 0.41 | 0.45 | 0.16 ± 0.19 | 0.42 ± 0.23 | 0.38 |
| Stress fracture – femur | 0.33 ± 0.17 | 0.69 ± 1.08 | 0.61 ± 0.37 | 0.94 | 0 ± 0 | 0.19 ± 0.21 | 0.36 | 0.16 ± 0.24 | 0.42 ± 0.22 | 0.42 |
| Stress fracture – tibia | 0.27 ± 0.19 | 0 ± 0 | 0.45 ± 0.47 | 0.33 | 0 ± 0 | 0.38 ± 0.25 | 0.13 | 0 ± 0 | 0.42 ± 0.28 | 0.13 |
| Thigh pain | 0.27 ± 0.12 | 0 ± 0 | 0.30 ± 0.19 | 0.11 | 0.20 ± 0.33 | 0.38 ± 0.21 | 0.66 | 0.16 ± 0.25 | 0.34 ± 0.14 | 0.53 |
| Tendinopathy – peroneal | 0.22 ± 0.15 | 0 ± 0 | 0.15 ± 0.14 | 0.29 | 0.40 ± 0.50 | 0.19 ± 0.20 | 0.69 | 0.31 ± 0.38 | 0.12 ± 0.25 | 0.64 |
| Traumatic joint sprain | 0.22 ± 0.09 | 1.37 ± 0.43 | 0.15 ± 0.15 | **0.0070** | 0 ± 0 | 0.19 ± 0.13 | 0.15 | 0.31 ± 0.17 | 0.17 ± 0.10 | 0.47 |
| Repetitive joint sprain | 0.22 ± 0.11 | 0 ± 0 | 0 ± 0 | n/a | 0 ± 0 | 0.76 ± 0.34 | **0.0254** | 0 ± 0 | 0.34 ± 017. | **0.0417** |
| Tendinopathy – tibialis anterior | 0.22 ± 0.11 | 0 ± 0 | 0.30 ± 0.18 | 0.09 | 0.20 ± 0.19 | 0.19 ± 0.25 | 0.97 | 0.16 ± 0.15 | 0.25 ± 0.15 | 0.64 |
| Stress fracture – sacrum | 0.11 ± 0.06 | 0 ± 0 | 0.15 ± 0.15 | 0.30 | 0 ± 0 | 0.19 ± 0.09 | **0.0369** | 0 ± 0 | 0.17 ± 0.09 | 0.06 |
| Cartilage damage – labrum | 0.11 ± 0.09 | 0 ± 0 | 0.15 ± 0.12 | 0.21 | 0 ± 0 | 0.19 ± 0.25 | 0.44 | 0 ± 0 | 0.17 ± 0.13 | 0.19 |
| Stress fracture – fibula | 0.05 ± 0.08 | 0.69 ± 1.16 | 0 ± 0 | 0.55 | 0 ± 0 | 0 ± 0 | n/a | 0.16 ± 0.26 | 0 ± 0 | 0.55 |
| Tibial stress injury – stress reaction | 0.05 ± 0.08 | 0 ± 0 | 0 ± 0 | n/a | 0.69 ± 1.08 | 0 ± 0 | 0.53 | 0.16 ± 0.24 | 0 ± 0 | 0.52 |
| Tendinopathy – tibialis posterior | 0.05 ± 0.07 | 0 ± 0 | 0 ± 0 | n/a | 0 ± 0 | 0.19 ± 0.23 | 0.40 | 0 ± 0 | 0.08 ± 0.10 | 0.41 |

RFS, rearfoot strike; FFS, forefoot strike; bold numbers are significant at p<0.05

All injuries repetitive unless otherwise indicated