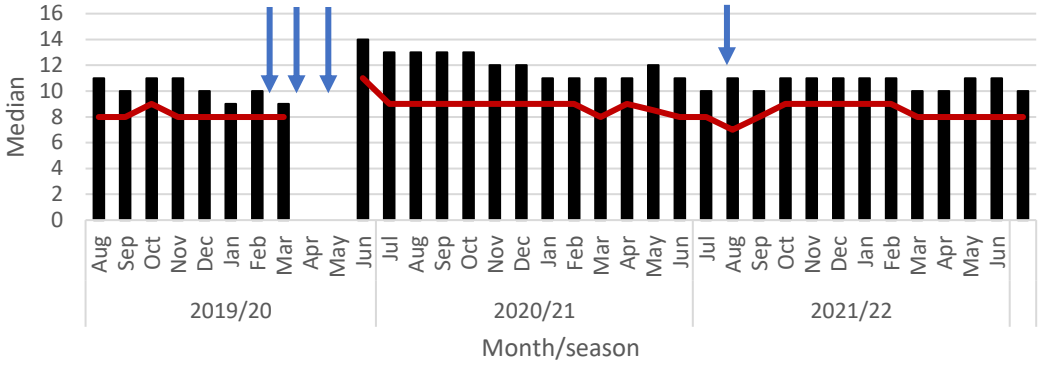


**Supplementary Figure S1.** Median number of starters (black bar) and races (red line) by season and month for Thoroughbred flat racing in the 2019/20-2021/22 seasons. Arrows indicate months where there was a nationwide Covid 19 lockdown.

**Supplementary Table S1.** Univariable incidence rate ratios (IRR) and 95% confidence of an incident (horse fall, collision, or stumble) examination occurring with the effects of season, age category, sex, number of starters, track surface, race distance and race type.

| Univariable | IRR | p-value | Wald p-value |
|---|---|---|---|
| Season | | | |
| 2019/20 | (Referent) | | 0.004 |
| 2020/21 | 0.6 [0.5-0.9] | 0.008 | |
| 2021/22 | 0.6 [0.4-0.8] | 0.003 | |
| Age category (years) | | | |
| 2 | (Referent) | | 0.746 |
| 3 | 1.4 [0.6-4.7] | 0.503 | |
| 4+ | 1.3 [0.5-4.2] | 0.612 | |
| Sex | | | |
| Male (colt, gelding stallion) | 0.8 [0.6-1.1] | | |
| Female (filly or mare) | (Referent) | | 0.242 |
| Number of starters | | | |
| Less than 9 | (Referent) | | 0.132 |
| 9 or more | 0.8 [0.5-1.1] | | |
| Surface | | | |
| Dead | (Referent) | | 0.060 |
| Good | 1.1 [0.8-1.6] | 0.526 | |
| Heavy | 0.7 [0.4-1.0] | 0.068 | |
| Slow | 0.6 [0.3-0.9] | 0.018 | |
| Soft | 0.9 [0.4-1.9] | 0.862 | |
| Synthetic | 1.2 [0.5-2.3] | 0.652 | |
| Distance | | | |
| Sprinter | 1.2 [0.7-2.3] | 0.480 | 0.290 |
| Miler | 1.3 [0.7-2.4] | 0.384 | |
| Middle distance | (Referent) | | |
| Stayer | 1.7 [0.9-3.4] | 0.099 | |
| Black type race | | | |
| Yes | 0.9 [0.05-3.9] | | |
| No | Referent | | 0.891 |

**Supplementary Table S2.** Univariable incidence rate ratios (IRR) and 95% confidence of a non-incident (veterinary examination of a horse is required but no extenuating circumstances) examination occurring with the effects of season, age category, sex, number of starters, track surface, race distance and race type.

| Univariable | IRR | p-value | Wald p-value |
|---|---|---|---|
| Season | | | |
| 2019/20 | (Referent) | | <0.001 |
| 2020/21 | 0.8 [0.7-0.9] | 0.001 | |
| 2021/22 | 1.0 [0.9-1.1] | 0.902 | |
| Age category (years) | | | |
| 2 | (Referent) | | <0.001 |
| 3 | 0.8 [0.6-1.0] | 0.053 | |
| 4+ | 0.6 [0.5-0.8] | <0.001 | |
| Sex | | | |
| Male (colt, gelding stallion) | 1.0 [0.9-1.1] | | |
| Female (filly or mare) | (Referent) | | 0.705 |
| Number of starters | | | |
| Less than 9 | (Referent) | | <0.001 |
| 9 or more | 0.7 [0.7-0.9] | | |
| Surface | | | |
| Dead | (Referent) | | <0.001 |
| Good | 1.0 [0.9-1.2] | 0.988 | |
| Heavy | 0.8 [0.7-0.9] | 0.004 | |
| Slow | 0.7 [0.6-0.9] | <0.001 | |
| Soft | 1.3 [1.0-1.6] | 0.049 | |
| Synthetic | 1.4 [1.0-1.7] | 0.017 | |
| Distance | | | |
| Sprinter | 1.0 [0.8-1.2] | 0.645 | <0.001 |
| Miler | 1.1 [0.9-1.3] | 0.624 | |
| Middle distance | (Referent) | | |
| Stayer | 1.4 [1.1-1.7] | 0.002 | |
| Race type | | | |
| Yes | 0.2 [0.04-0.7] | | |
| No | Referent | | 0.035 |