

Race Injury Review Panel analysis and recommendations 1 July 2019 - 31 December 2019

Foreword

On 8 February 2019 the NSW Greyhound Welfare and Integrity Commission (the Commission) established the Race Injury Review Panel to provide a mechanism for the systematic review of serious and catastrophic injuries to greyhounds racing on NSW tracks.

The Terms of Reference for the Panel are located on the GWIC website.

The fundamental purpose of the Race Injury Review Panel process is to better understand the underlying causes of racing injuries and to develop and implement preventative measures aimed at reducing the incidence and severity of injuries to racing greyhounds.

This report provides an overview of the collective findings of the reviews conducted by the Race Injury Review Panel for the first half of the 2019-2020 financial year (1 July 2019-31 December 2019).

How to interpret this report

Due to the multi-factorial nature of racing related greyhound injuries, each Panel uses its individual and collective experience, knowledge and judgement to form a view about the likely causes of each incident reviewed by the Panel.

Therefore both the findings of each individual review and the collective findings in this report should not be interpreted as being indisputable. They are 'judgement' based assessments reflecting the best endeavours of each panel to form conclusions about causal factors.

Particular care should be taken in the interpretation of these reports due to the relatively small number of panel reviews conducted.

Subsequent versions of this report will include yearly trend analysis that, over time, will provide a more reliable picture of the contributing causal factors of Major II and Catastrophic greyhound injuries.

An explanation of the Panel's review process

All catastrophic injuries that result in the euthanasia of a greyhound on welfare grounds and any sudden deaths occurring at race meetings are subject to a detailed case by case review by the Panel. The Panel also analysed the majority of all serious (Major II) injuries. During this reporting period, the panel analysed the race replays and all supporting information in relation to 51 catastrophic and 51 major II injuries.

The Panel analysed all contributing factors to each case according to the following criteria:

- 1. Race-related: race factors such as interference, collisions and falls
- 2. Track-related: the conditions of the track at the time of the incident; track maintenance history and environmental influences
- 3. Greyhound-related: the greyhound's racing history, including frequency of racing; its prior experience and performance; breeding and genetics; training influences; previous injuries.

The Panel meets monthly and keeps a log of contributing factors and recommendations. Feedback is also provided to GRNSW where track issues are judged to be contributing factors

Analysis

1. Catastrophic injuries: Contributing Factors

Month	Race Factors	%	Track Factors	%	Greyhound Factors	%	Misadventure	%	Other	%	Unknown	%	Total
Jul	3	50.0%	0	0.0%	2	33.3%	0	0.0%	1	16.6%	0	0.0%	6
Aug	1	25.0%	1	25.0%	1	25.0%	0	0.0%	1	25.0%	0	0.0%	4
Sept	0	0.0%	0	0.0%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	2
Oct	3	42.9%	0	0.0%	3	42.9%	0	0.0%	0	0.0%	1	14.3%	7
Nov	6	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	6
Dec	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	1
Total:	13	50.0%	1	3.8%	9	34.6%	0	0.0%	2	7.7%	1	3.8%	26 100%

The majority (50.0%) of catastrophic injuries in the second semester of 2019 were as a result of racing incidents, usually collisions resulting in a fall. The most common injuries resulting in euthanasia were multiple fractures of the hock joint (ankle), followed by compound radius/ulna (forearm) fractures. The average field size for catastrophic injuries this semester was 7.5 greyhounds per race (range 6-8).

Greyhound factors accounted for the next highest category (38.5%). In these cases, the previous racing frequency or injury history of the greyhound may have predisposed it to the catastrophic event. Many of these were chronic muscle or joint injuries that were being managed; or where the greyhound had been rested for some time and/or had only raced once in 30 days; or where the greyhound had an excessive number of lifetime starts and was over four years of age. Fitness may play a role in these injuries and will continue to be monitored as a contributing factor. For catastrophic injuries this semester, the total number of lifetime starts ranged from 1 start to 123 starts, with an average of 33.7 starts. Inexperienced greyhounds that were younger with few starts or were racing at a new venue for the first time also accounted for some of these injuries. Training and racing patterns of younger greyhounds should be considered further as a contributing factor for catastrophic injuries.

Injuries which occur in the absence of apparent racing or greyhound contributing factors (3.8%) are of concern. In these instances, the conditioning and rearing, nutrition status and genetics of the greyhound may all be factors for future study.

Track related factors (3.8%), usually occur in combination with a racing incident. Most commonly, a drier racing surface, with less traction may have contributed, particularly to incidents around a bend. The majority of catastrophic injuries occurred around a bend (21/26) with the remainder occurring soon after the start (3/26) or in the back straight (1/26) or home straight (1/26).

2. Major II injuries: Contributing Factors

Month	Race Factors	%	Track Factors	%	Greyhound Factors	%	Misadventure	%	Other	%	Unknown	%	Total
July	3	33.3%	1	11.1%	5	66.6%	0	0.0%	0	0.0%	0	0.0%	9
Aug	5	62.5%	0	0.0%	1	12.5%	0	0.0%	0	0.0%	2	25.0%	8
Sept	5	35.7%	0	0.0%	7	50.0%	0	0.0%	1	7.0%	1	7.0%	14
Oct	11	68.75%	0	0.0%	3	18.75%	0	0.0%	0	0.0%	2	12.5%	16
Nov	6	50.0%	1	8.3%	1	8.3%	0	0.0%	2	16.6%	2	16.6%	12

Dec	8	47.0%	1	6.0%	5	29.0%	0	0.0%	1	6.0%	2	12.0%	17
Total:	38	50%	3	4%	22	29%	0	0.0%	5	6.5%	9	11.5%	76 100%

The Major II or serious injury analysis reveals that the highest contributing factor (50.0%) were race factors. Interference causing major collisions and falls remains the most prominent cause. The average race field size was 7.3 (range 5-8). Turns were the most common area for interference. The most common injury was a simple hock (ankle) fracture and the second most common was a metatarsal (foot) fracture.

Greyhound factors make up the second most frequent contributing factor (29%). Previous injury history was most represented as well as racing frequency. The average total lifetime starts for greyhounds suffering a serious injury this semester was 47, with a range of between 3 and 109 starts represented.

A trainer's representative joined the panel deliberations for all meetings. The Commission wishes to thank those trainers who contributed with their insights and industry knowledge of greyhound racing patterns, training practices, racing frequencies, breeding, feeding practices and training tracks. The contributions of trainers to this Panel is invaluable, both to understanding the contributing factors to racing injuries and to the development of strategies that can address these causes. The representation of trainers on the panel will continue into the future.

Additional Analysis - Greyhound Factors

The Panel is continuously enhancing the analysis it undertakes to better understand the key factors that contribute to serious racing incidents and injuries. For the first time, analysis of the age of greyhounds that have been subject to Panel review has occurred to determine whether and to what extent, the age of the greyhound plays a role in the frequency of racing injuries. The number of lifetime racing starts has also been related to the age of each injured greyhound. This analysis is shown in Figure 1 below.

This analysis is preliminary, and care should be taken in its interpretation. The Commission is keen for feedback on this or any other analysis contained in this report, via vets@gwic.nsw.gov.au.

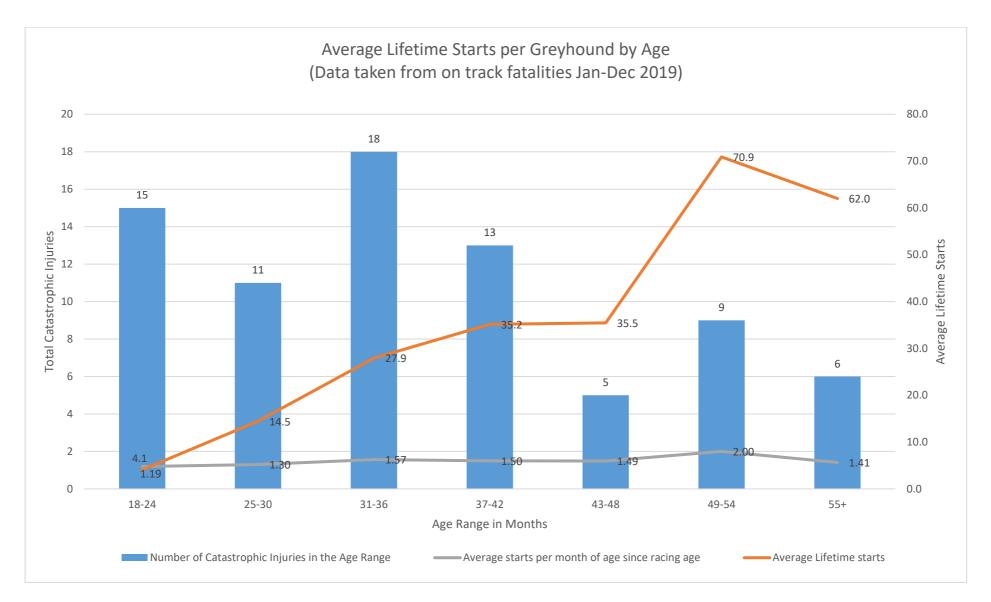


Figure 1: Age analysis of catastrophic injuries and average lifetime starts for 12 months.

Some initial observations from the analysis in Figure 1 include:

- The majority of catastrophic injuries for this reporting period occurred in the age group of 31-36 months.
 - o This is to be expected as the majority of the racing population falls into this age cohort.
- The second highest number of catastrophic injuries occurred in the age group of 18-24 months.
 - This is consistent with RIRP findings that young and inexperienced greyhounds racing at a track may predispose them to a serious collision and fall.
- The lowest number of catastrophic injuries occurred in the age group of 43-48 months.
 - o This may reflect the population distribution in that age group (ie. a decline in the number of greyhounds racing at this age).
- A slight increase in the number of catastrophic injuries occurred in greyhounds racing at age 49-54 months.
 - o These are greyhounds likely racing in masters graded races. This is consistent with the findings of the RIRP.
- The final age bracket of greater than 55 months of age has the second lowest number of catastrophic injuries.
 - This represents the smallest population of racing greyhounds. However, the number of catastrophic injuries, when assessed against the percentage of the total population of greyhounds racing at this age, may be significant.
 - o This may also reflect the relative soundness and fitness required to continue to race at that age.
- The average number of lifetime starts increased steadily through the age series.
 - This pattern is to be expected, noting however a significant increase observed between the 43-48 months and 49-54 months age categories.
 - o Further analysis is required to determine whether this is statistically significant in terms of resultant serious race injuries.
- The average starts per month of racing is fairly constant across the age cohorts of the population of injured greyhounds subject to Panel review.
 - More analysis could be undertaken to determine if this picture is consistent with the population of greyhounds that did not suffer serious or catastrophic injuries.

Injury Prevention Strategies and Responses

The Panel has identified a number of ideas and strategies for further investigation in order to reduce the incidence and severity of racing related injuries. These include:

- 1. Investigating the preparation and design of mats in front of starting boxes to ensure best practice for safety and welfare (GRNSW track maintenance).
- 2. Examining starting box position and design parameters of certain tracks and the influence of starting box position on race incidents and subsequent injuries (UTS).
- 3. Instituting a drought management plan for track maintenance in drought affected regions (GRNSW track maintenance).
- 4. Enhanced participant education and training (GRNSW and GWIC):
 - Canine First Aid: injury detection and management
 - Quality nutrition for rearing and racing, supporting performance dogs

The following strategies have been implemented since the 1st semester report:

- 1. Reporting reasons for a 30 day break from racing in the Stewards reports
- 2. Designing a system for vets to review the 90 day injury and racing history of all greyhounds prior to each race meeting
- 3. Development of enhanced breeding criteria for brood bitches, including performance and welfare matrices.

The Commission will undertake more work to assess the feasibility and timeframes for implementing these recommendations