

Analysis of greyhound racing injuries



1 January - 31 March 2022

Foreword

The NSW Greyhound Welfare & Integrity Commission has published data since 2018 about injuries sustained by greyhounds while racing in NSW.

Reports are published:

- Quarterly, providing timely updates
- Annually, providing analysis of long-term trends

Together, these reports contribute to a growing body of evidence which can assist the industry in making evidence-based decisions with the aim of reducing the incidence and severity of greyhound racing injuries.

The Commission has adopted a nationally agreed convention for classifying injuries and will use this for reporting injury numbers from this report onwards.

The new standard for documenting greyhound racing injuries in reports produced by the Commission can be found at on the GWIC website at this [link](#). A comparison of the national classification system and the system previously used by GWIC is on the last page of this report.

Note that figures for total injuries now include minor injuries not requiring a stand-down period, for consistency with the national standards. In quarterly reports between January 2020 and December 2021, total injury figures counted only injuries requiring a stand down period.

Key observations

- Heavy rain over much of NSW, particularly coastal areas, may have contributed to the overall higher injury rate in this quarter and the previous quarter by affecting track conditions and limiting outdoor training opportunities.
- The Category E (euthanasia and sudden death) injury rate this quarter is the lowest on record, and less than one-third the average rate for the first quarter over the last three years. The decline in this injury category may be due in part to greater take-up of the race injury rebate scheme.
- A larger proportion of injuries required a stand down time of 14 or more days this quarter when compared to the average.

Key data this quarter

Injuries sustained at race meetings

Table 1: Races and injuries this quarter

REPORTING PERIOD 1 January - 31 March 2022				1st Quarter 2022		
Race meetings				291		
Races				3062		
Starts (times a greyhound has started a race)				21912		
Individual greyhounds raced				4256		
Average starts per greyhound				5.1		
Post-race veterinary examinations				1486		
Injury category	Incapacitation period (days)	Number of greyhounds injured	% Injured per injury category	Cumulative total per injury category	Injuries per 100 greyhounds raced	Injuries per 1,000 starts
Category A	none	74	8.9%	8.9%	1.7%	3.4
Category B	3-10	306	36.6%	45.5%	7.2%	14.0
Category C	11 - 27	279	33.4%	78.9%	6.6%	12.7
Category D	28 - 90	168	20.1%	99.0%	3.9%	7.7
Category E	euthanased/died	8	1.0%	100.0%	0.2%	0.4
Total injuries		835			19.6%	38.1
No apparent injury		651				
Total post-race examinations		1486				
Category F	43 – 90, euthanased/died*	72	8.6%		1.7%	3.3
Category G	0 - 42 ⁺	763	91.4%		17.9%	34.8

* Category F Includes all Category E incidents as well as those within Category D that are deemed to be of a particularly serious nature. Please refer to the table at the end of this report for further information.

+ Category G Includes any injury in Categories A to C and those in Category D that do not fit the definition of Category F. Please refer to the table at the end of this report for further information.

Track-related mortality not as part of race meetings

Note that this data depends on OTVs following up on a Category D injury suffered at the track and reports made by participants to the Commission, and therefore may not be complete at the time of reporting. Due to this, and for comparability with previous years of data:

- Instances of euthanasia by a private veterinarian, away from the racetrack, after sustaining injury at a race meeting are counted as Category D injuries in the table above as the greyhound was not euthanased on track.
- Instances of euthanasia or sudden death after sustaining injury in a trial at a racetrack are not included in the table above but included in Table 2 below.
- More information on greyhounds medically euthanased away from the racetrack can be found in the Commission's quarterly 'Greyhound Retirement and End of Life Report', which is available on the Commission's [website](#).

Table 2: Track related mortality not as part of race meeting

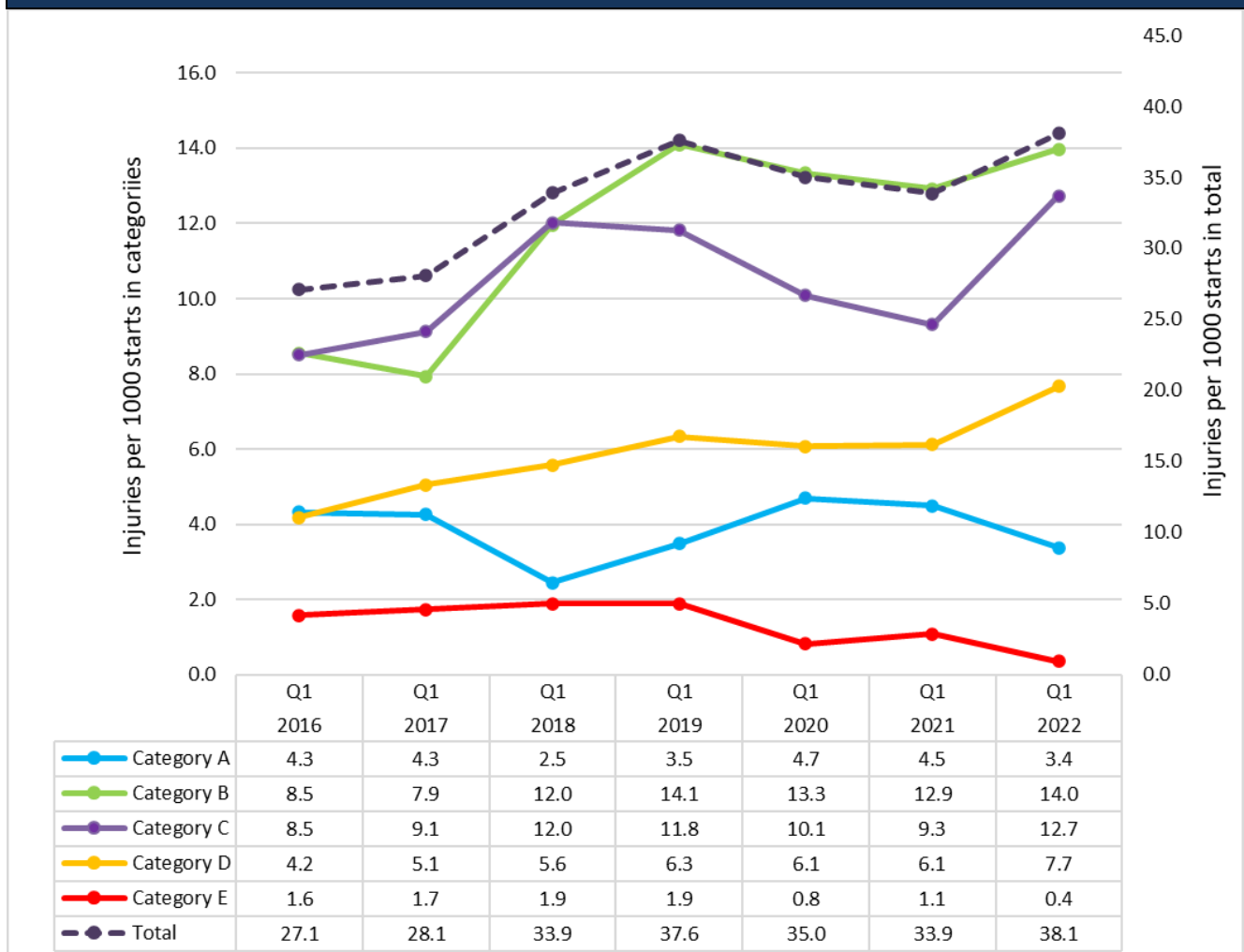
Reporting Period	1 January - 31 March 2022	Q 2022 / 1st Quarter
Reported euthanased by private veterinarian after sustaining injury at race meeting		2
Reported euthanased or sudden death after sustaining injury in unofficial trial at racetrack		0
Reported euthanased or sudden death after sustaining injury in official trial at racetrack		0

Trends

Controlled for seasonal variation

Injury rates are correlated with season, with hotter quarters 1 and 4 in each year usually having higher injury rates than cooler quarters 2 and 3. Comparing this quarter's data with the same quarter in previous years reduces the influence of season and provides a more accurate picture of long-term trends in injury rates.

Figure 1: Injury trends for same quarter over 7 years - Categories A to E



*Note: reporting prior to Q3 2018 was by GRNSW and is not exactly comparable due to differences in data definitions and recording.

Figure 2: Injury trends for same quarter over 4 years - Categories F and G

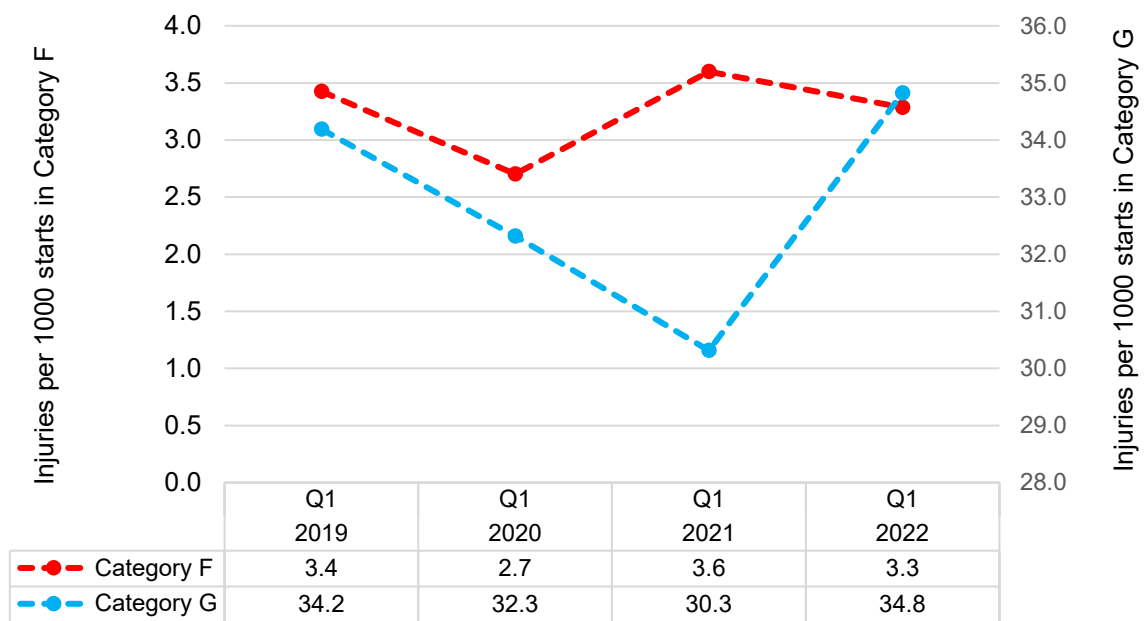


Table 3: This quarter compared to the same quarter in previous years

Injury type	This quarter compared to same quarter in previous years
Category A	At 3.4 per 1000 starts, the lowest for a Q1 since 2018 (2.5) and lower than the Q1 3-year average of 4.2 per 1000 starts.
Category B	At 14.0 per 1000 starts, higher than the previous Q1 (12.9) but comparable to the Q1 3-year average of 13.5 per 1000 starts.
Category C	At 12.7 per 1000 starts, higher than the previous Q1 (9.3) and higher than the Q1 3-year average of 10.4 per 1000 starts.
Category D	At 7.7 per 1000 starts, higher than the previous Q1 (6.1) and the Q1 3-year average of 6.2 per 1000 starts.
Category E	At 0.4 per 1000 starts, the lowest for Q1 on record and much lower than the 3-year average of 1.3 per 1000 starts.
Total	At 38.1 per 1000 starts, higher than the previous Q1 (33.9) and the Q1 3-year average of 35.5 per 1000 starts.
Category F	At 3.3 per 1000 starts, lower than the previous Q1 (3.6) but comparable to the Q1 3-year average of 3.2 per 1000 starts.
Category G	At 34.8 per 1000 starts, higher than the previous Q1 (30.3) but comparable to Q1 2019 but higher than 3-year average of 32.3 per 1000 starts.
Comment	Heavy rain over much of NSW, particularly coastal areas, may have contributed to the overall higher injury rate in this quarter by affecting track conditions and limiting outdoor training opportunities.

All quarters

Figure 3: Injuries in every quarter since July 2018 in Categories A - E

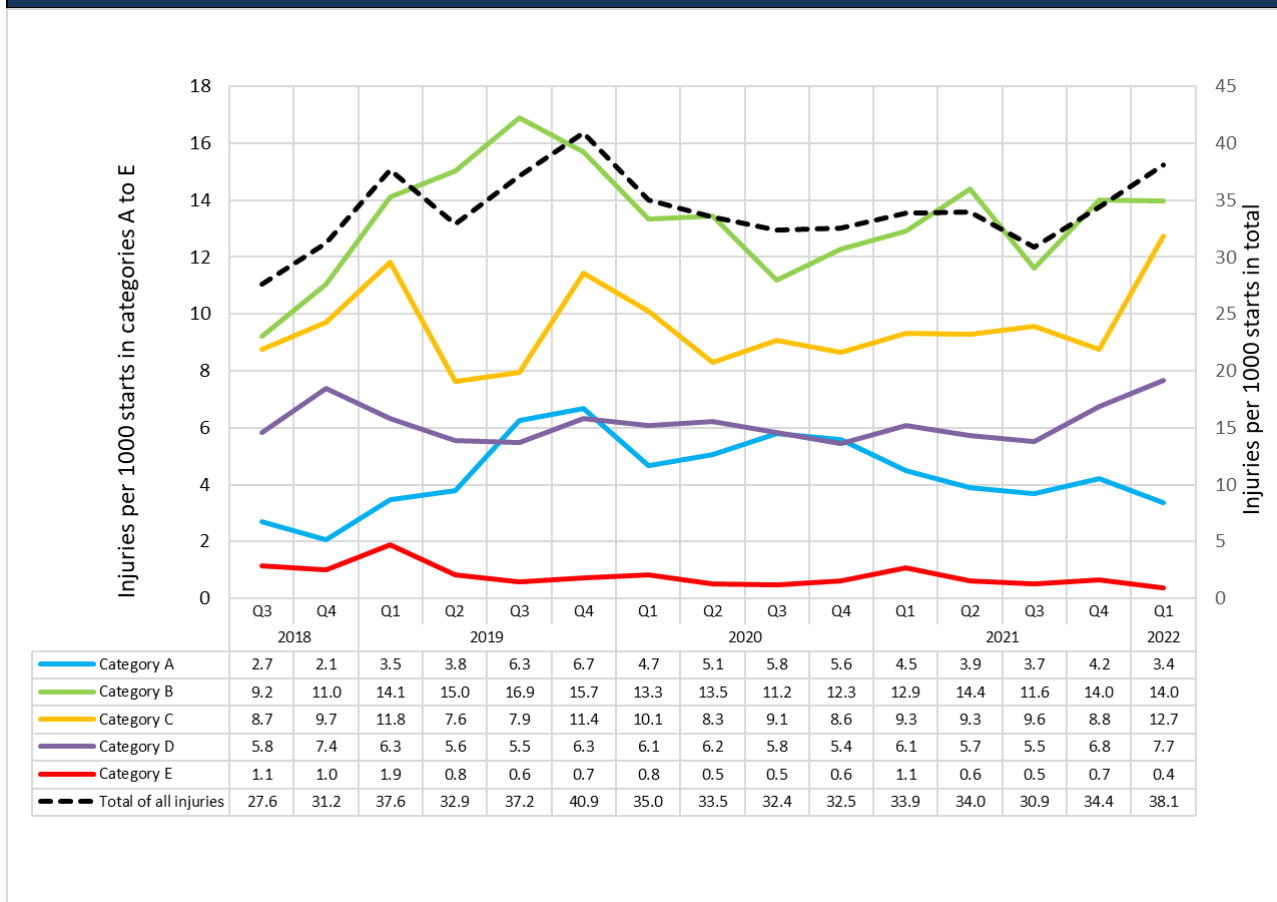


Figure 4: Injuries since July 2018 in Categories F and G

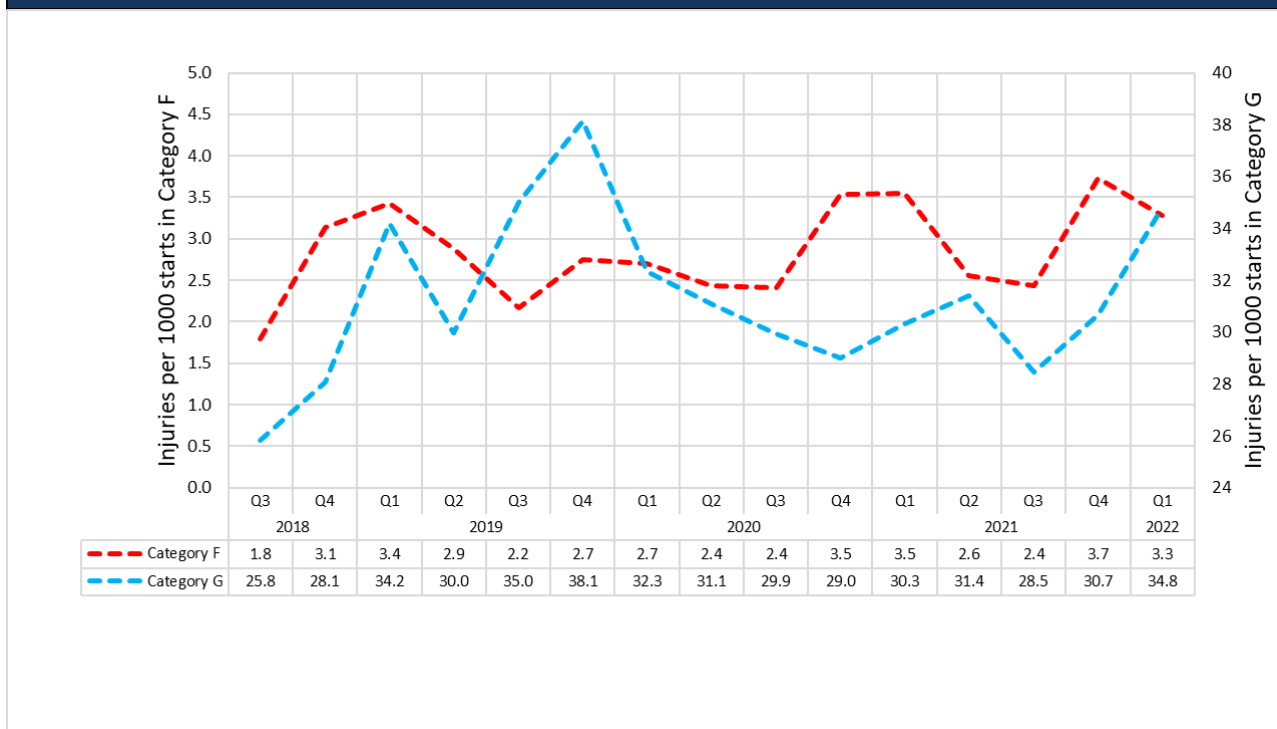


Figure 5: Proportion of injuries by stand down time

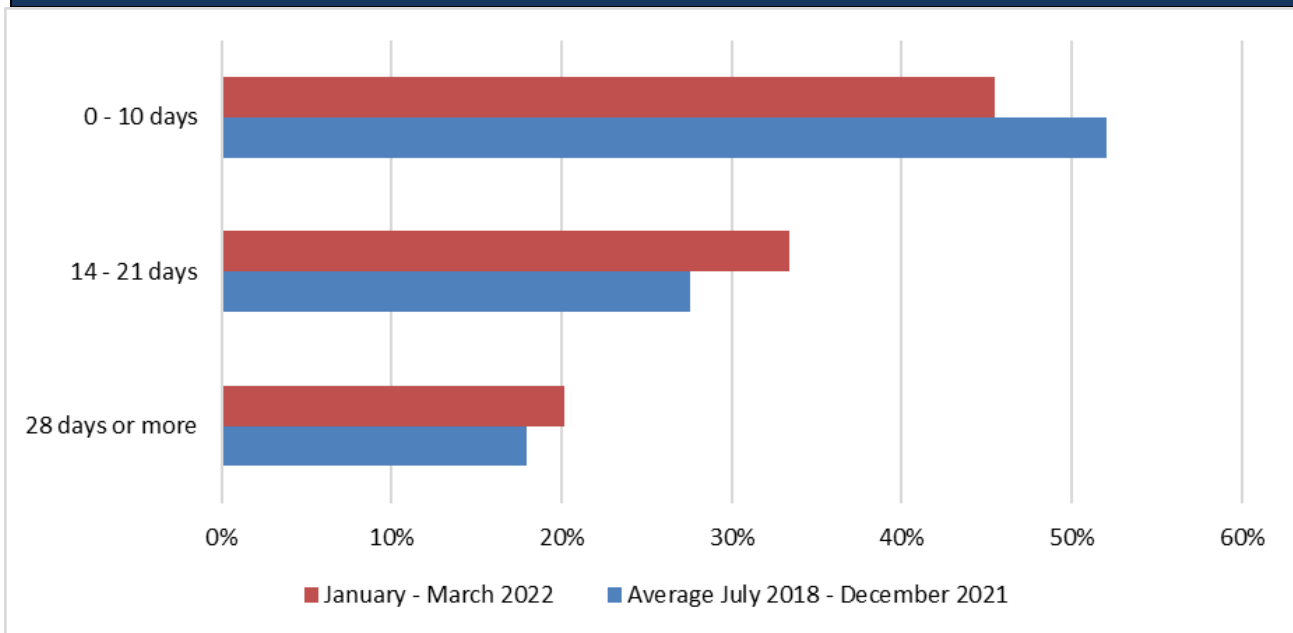


Table 4: This quarter compared to all previous quarters since June 2018

Category A	At 3.4 per 1000 starts, the lowest since 2018 (2.1) and lower than the 3-year average of 4.4 per 1000 starts.
Category B	At 14.0 per 1000 starts, the same as last quarter and comparable to the 3-year average of 13.3 per 1000 starts.
Category C	At 12.7 per 1000 starts, an increase on the previous quarter (8.8) and higher than 3-year average of 9.5 per 1000 starts.
Category D	At 7.7 per 1000 starts, a small increase on the previous quarter (6.8) and higher than the 3-year average of 6.1 per 1000 starts.
Category E	At 0.4 per 1000 starts, the lowest on record and half the value of the 3-year average of 0.8 per 1000 starts.
Total	At 38.1 per 1000 starts, an increase on the previous quarter (34.4) and higher than the 3-year average of 34.1 per 1000 starts.
Category F	At 3.3 per 1000 starts, a decrease on the previous quarter (3.7) but higher than the 3-year average of 2.9 per 1000 starts.
Category G	At 34.8 per 1000 starts, an increase on the previous quarter (30.7) and higher than the 3-year average of 31.3 per 1000 starts.

Comment

Heavy rains over much of NSW in the last 6 months may have contributed to the increase in total injury rates seen this quarter and the last quarter of 2021 (Figure 3) by affecting track conditions and limiting outdoor training opportunities.

The lowest-ever Category E (euthanasia and sudden death) injury rate this quarter follows a trend of decline in this injury category over the last 3 years (Figure 3), which may be due in part to greater take-up of the race injury rebate scheme.

A larger proportion of injuries required a stand down time of 14 or more days this quarter when compared to the average from July 2018 (Figure 5).

Race Injury Review Panel Analysis

There are many causes of injuries in racing greyhounds and the relative importance and interactions of causative factors vary. Causative factors can be divided into:

1. **Greyhound factors:** genetics, nutrition, physical growth and development, fitness, race preparation, racing form and previous injury history.
2. **Track factors:** design and surface characteristics; environmental influences.
3. **Race factors:** race distance and racing incidents (collisions).

Category E and F injuries which occurred during this quarter were reviewed by the Race Injury Review Panel, continuing work begun in February 2019. The Panel assesses factors that may have contributed to each injury and where it is attributed to greyhound, track, or race factors. Over time, the data collected will assist in informing prevention strategies and regulatory steps aimed at minimising the incidence of racing injuries.

Table 5 summarises the results of Panel deliberations and data for this quarter. In some instances, more than one factor contributed to an injury, usually where track factors and racing incidents both contributed to an incident. Where insufficient evidence is available (such as in trials or races where no video footage is available) the possible contributions to the injury are not considered by the Panel, but those greyhounds may be included in counts of the gender, age, distance, location, and race history of injured greyhounds.

Table 5: Review of Category E and F injuries this quarter			
	Category E	Category D where stand down is 43-90 days	Category F
Race Injury Review Panel assessment of contributing factors to injuries			
Greyhound factors	4	27	31
Race factors	3	34	37
Track factors	1	0	1
More than one factor	0	0	0
Unable to attribute factors	0	0	0
Total assessed*	8	61	69
Gender of injured greyhound			
Female	6	34	40
Male	2	27	29
Age of injured greyhound to nearest six months			
1.5 years	0	2	2
2 years	2	10	12
2.5 years	3	10	13
3 years	0	19	19
3.5 years	1	4	5
4 years	1	13	14
4.5 years	0	2	2
> 5 years	1	0	1
Distance of race in which greyhound was injured in meters			
Under 300	1	6	7
300-399	5	24	29
400-499	1	13	14
500-600	1	17	18
Over 600	0	1	1
Location on track at which injury appears to have occurred			
Soon after start	0	4	4
Straight	0	8	8
Turn	8	47	55
Catching pen	0	0	0
Unknown	0	2	2
Race history of injured greyhounds			
Average and range of starts in last 30 days	2.3 (1 – 4)	2.2 (0 – 5)	2.2 (0 – 5)
Average and range of starts in last 60 days	4 (1 – 7)	5.2 (0 – 11)	5.1 (0 – 11)
Average and range of career starts	25.2 (5 – 85)	41.2 (4 - 108)	39.2 (4 – 108)

Appendix 1: Classification of injuries

New classification name and definition starting 2022	Equivalent in pre-2022 classification
<p>Category A Race injuries, where the injury occurred on track in a race and identified post-race by the On-Track Veterinarian after a post-race veterinary examination, given no stand down period by the officiating veterinarian, which are typically incidental findings such as skin abrasions and are expected to not need any additional time off prior to racing. It excludes greyhounds examined and found not to be injured (No apparent injury / No anomaly detected)</p>	<p>Minor 1 (Injury so minor that no stand down period required)</p>
<p>Category B Race injuries, where the injury occurred on track in a race and identified post-race by the On-Track Veterinarian after a post-race veterinary examination, given a stand down period of 3-10 days by the officiating veterinarian, which are typically mild muscle soreness, or other minor injuries that are generally expected to recover within a short time period prior to being able to race again</p>	<p>Minor also called Minor 2 prior to 2020 (1-10 day stand down) No post-race 1-2 day stand downs have been issued by GWIC.</p>
<p>Category C Race injuries, where the injury occurred on track in a race and identified post-race by the On-Track Veterinarian after a post-race veterinary examination, given a stand down period of 11-27 days by the officiating veterinarian, which are typically lacerations, joint sprains, or muscle injuries (Grade 2), or other forms of soreness and are generally expected to recover within that time period prior to being able to race again</p>	<p>Medium (14-21 day stand down)</p>
<p>Category D Race injuries, where the injury occurred on track in a race and identified post-race by the On-Track Veterinarian after a post-race veterinary examination, given a stand down period 28-90 days by the officiating veterinarian, which are typically more significant muscle tears, bone fractures or other injuries that require a greater amount of treatment and recovery. These injuries may or may not race again depending on severity, prognosis and treatment</p>	<p>Major 1 (28-42 day stand down) and Major 2 (43-90 day stand down)</p>
<p>Category E Any greyhound that died during a race or was euthanased by the officiating veterinarian due to the catastrophic nature of the injury sustained. Note: this will include a small number of medical conditions</p>	<p>Catastrophic (euthanasia and sudden death)</p>
<p>Category F Includes all Category E incidents as well as those within Category D that are deemed to be of a particularly serious nature. The following are included:</p> <ul style="list-style-type: none"> • death or euthanasia on-track; • any skull or spine fracture or paralysis (partial or complete); • any long bone fracture (i.e., humerus, radius/ulna, femur or tibia); • a hock fracture/dislocation where the stand-down period is 60 or 90 days; • any other fracture where the stand-down period is 60 or 90 days; • any other joint injury where the stand-down period is 60 or 90 days; • a skin injury where the stand-down period is 60 or 90 days; • a soft tissue injury (including muscle injury) where the stand-down period is greater than 90 days. 	<p>Catastrophic and Major 2 (43 - 90 day stand down including long bone fractures; severe spinal, pelvic or skull injuries; major fracture dislocations, Achilles tendon ruptures)</p>
<p>Category G Includes any injury in Categories A to C and those in Category D that do not fit the definition of a Serious injury (i.e., Category F)</p>	<p>Minor 1, Minor (Minor 2), Medium and Major 1</p>
<p>Post-race Veterinary Examination An examination performed by the officiating veterinarian after an event to determine the presence or absence of an injury / condition, that may result in a stand-down period being issued for the greyhound.</p>	<p>Post-race Veterinary Examination</p>