



# **Analysis of greyhound racing injuries**

1 January 2021- 31 March 2021

## 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 make more evidence-based decisions with the aim of reducing the incidence and severity of greyhound racing injuries.

Standards for documenting and reporting greyhound racing injuries used in reports prepared by the Commission can be found at <https://www.gwic.nsw.gov.au/news-and-updates/reports-and-statistics/injury-report/nocache>

Changes to report structure and content are sometimes made to enhance their utility. This quarterly report has a streamlined structure to make key data easier to find and improve the efficiency of report production.

## Key comments

- The total injury rate for the quarter under review has remained low and has not seen the seasonal upswing in racing injuries observed during previous summer quarters (Q1 and Q4)
- NSW experienced extreme weather events including major flooding during the period. The following race meetings were abandoned, due to inclement weather affecting the state of the track:

Date	Track	Date	Track	Date	Track
2.01.21	Wauchope	23.02.21	Lismore	21.03.21	Nowra
4.01.21	Maitland	24.02.21	Wentworth Park	21.03.21	Richmond
18.01.21	Casino	20.03.21	Gosford	22.03.21	Wauchope
29.01.21	Richmond	20.03.21	Wentworth Park	22.03.21	Maitland
29.01.21	Wagga	21.03.21	Wentworth Park		

- The majority of injuries (76%) recorded were minor or medium in nature, wounds and muscle injuries, requiring less than 21 days stand down from racing. This is a similar proportion observed in previous reports.
- The serious injury rate (Major II) increased this quarter compared to the same quarter last year but was slightly lower than Q4 2020. The Commission is further analysing the factors which may have contributed to this increase.
- The Catastrophic injury rate this quarter is the highest reported since Q1 2019. The Commission has published its public-facing principles in the treatment of serious racing injuries [here](#). The Commission is also reviewing the factors which may have contributed to this increase.

## Key data this quarter

### Injuries sustained at race meetings

Table 1: Races and injuries this quarter						
REPORTING PERIOD		1 January 2021- 31 March 2021			Q1 2021 / 1 <sup>st</sup> Quarter	
Race meetings				279		
Races				2833		
Starts (times a greyhound has started a race)				20 288		
Individual greyhounds raced				3905		
Average starts per greyhound				5.2		
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
Minor	1-10	262	44%	44%	6.7	12.9
Medium	14-21	189	32%	76%	4.8	9.3
Major I	28-42	73	12%	88%	1.9	3.6
Major II	43-90	50	8%	96%	1.3	2.5
Catastrophic	Euthanased/died	22	4%	100%	0.6	1.1
<b>Total</b>		596	100%	100%	15.3	29.4

Of the 22 greyhound fatalities during this quarter, all were euthanased at the track due to catastrophic injuries sustained during racing. No greyhounds died suddenly following a race (without suffering an apparent injury).

#### Euthanased not as part of race meeting (See Table 2)

This data depends on OTVs following up a Major II injury suffered at a race meeting as well as 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 Major II injuries in Table 1 because the greyhounds whilst suffering a severe injury, were not euthanised at the track.
- Any instances of euthanasia after sustaining injury in official trials are not included in Table 1 but are included in the following Table 2 and also depend upon timely reporting by participants

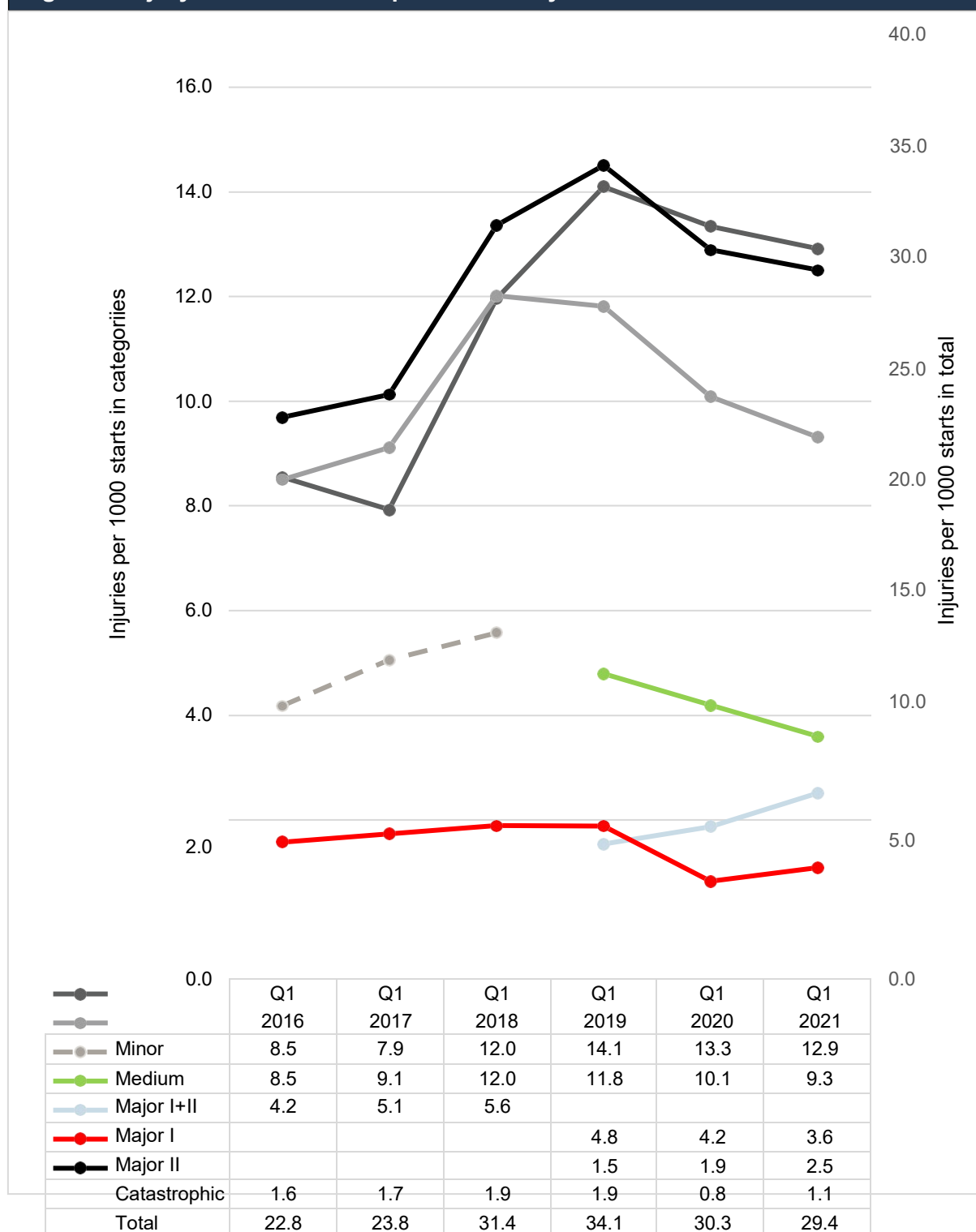
More information on greyhounds medically euthanased away from the racetrack can be found in the Commission's quarterly 'Greyhound Retirement and End of Life Report', which is available on the Commission's [website](#).

Table 2: Euthanasia not as part of a race meeting		
Reporting Period	1 January 2021 – 31 March 2021	Q1 2021 / 1 <sup>st</sup> Quarter
Reported euthanased by private veterinarian after sustaining injury at race meeting	4	
Reported euthanased after sustaining injury in unofficial trial at racetrack	2	
Euthanased/sudden death after sustaining injury in official trial at racetrack	0	

## Trends

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 (Figure 1 and Table 3) reduces the influence of season and provides a clearer picture of long-term trends in injury rates.

**Figure 1: Injury trends for same quarter over 6 years**



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

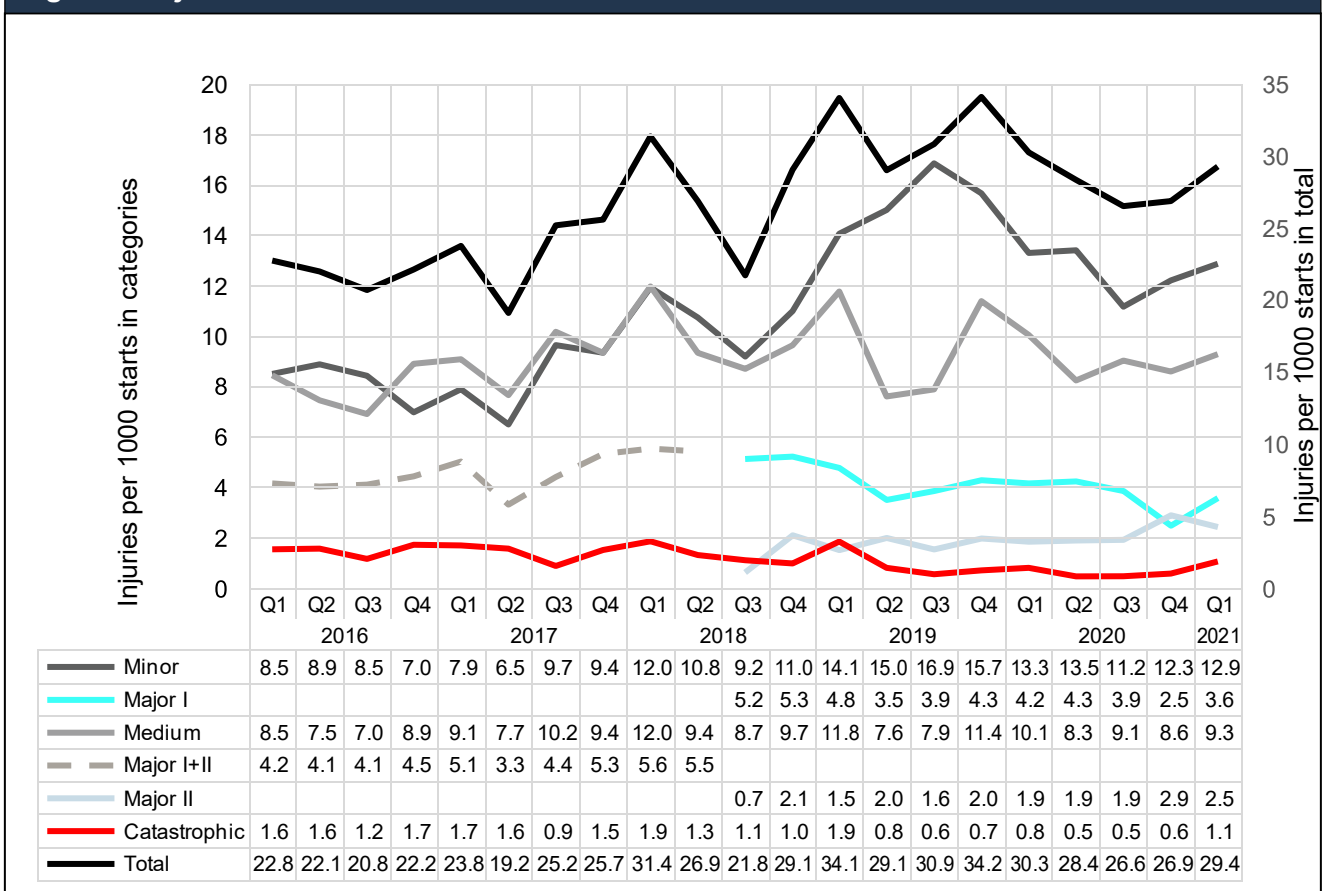
**Table 3: This quarter compared to the same quarter in previous years**

Minor	Decreased slightly (12.9 per 1000 starts) compared to Q1 2020 (13.3 per 1000 starts)
Medium	Decreased (9.3 per 1000 starts) compared to Q1 2020 (10.3 per 1000 starts), lowest Q1 on record.
Major I	Decreased (3.6 per 1000 starts) compared to Q1 2020 (4.2 per 1000 starts), lowest Q1 on record.
Major II	Increased (2.5 per 1000 starts) compared to Q1 2020 (1.9 per 1000 starts) but decreased from last quarter (Q4 2.9 per 1000 starts). Highest Q1 on record.
Catastrophic	Highest (1.1 per 1000 starts) since Q1 2019 (1.9 per 1000 starts) (0.6 per 1000 starts in Q4 2020)
Total	Lowest Q1 total injury rate on record (29.4 per 1000 starts), increased from last quarter (26.9 per 1000 starts)

**Comment**

- 76% of injuries were fully recoverable and incurred a stand-down period of 1-21 days, similar to previous reports.
- 9% of all injuries were serious, potentially career ending and required further treatment, some requiring surgery.
- % of all injuries resulted in euthanasia at the track.
- Euthanasia resulted in 0.6 for each 100 of all greyhounds that raced and 1.1 for each 1000 of starters.

**Figure 2: Injuries since 2016**



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

**Table 4: This quarter compared to all previous records**

Minor	Lowest summer quarter since GWIC's inception in 2018
Medium	Lowest summer quarter since GWIC's inception in 2018
Major I	Second lowest since recording of Major I began in 2018
Major II	Second highest since recording of Major II began in 2018
Catastrophic	Equivalent rate to summer season of Q4 2018- Q1 2019 (>1.0 per 1000 starts) and highest rate observed since then.
Total	Total injury rate does not show strong seasonal upswing typical in warmer quarters of other years.
<b>Comment</b>	
<ul style="list-style-type: none"> <li>• More serious injuries (Catastrophic + Major II) than in previous quarters of 2020.</li> <li>• The number of serious and Catastrophic injuries is the subject of further analysis for risk factors including, but not limited to race distance, starts per greyhound, racing frequency, injury history, fitness, climate, trial conditions and track preparation.</li> </ul>	

## 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, racing incidents (collisions) and number of greyhounds in a race.

Major II and Catastrophic 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 possible attributes it 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.

## Race injury prevention strategies recommended

A recommendation was made by the Panel to investigate the causes for the increase in serious and Catastrophic injuries over the summer months and the influence of climate, environmental conditions and other factors. The University of Technology Sydney (UTS) has been engaged to conduct this review.

**Table 5: Review of Major II and Catastrophic injuries this quarter**

	Catastrophic	Major II	Total
<b>Race Injury Review Panel assessment of contributing factors to injuries</b>			
Greyhound factors	0	4	4
Race factors	20	36	56
Track factors	0	0	0
More than one factor	1	3	4
Unable to attribute factors	1	7	8
<b>Total assessed</b>	<b>22</b>	<b>50</b>	<b>72</b>
Unable to be assessed	1	6	7
<b>Gender of injured greyhound</b>			
Female	7	27	34
Male	16	29	45
<b>Age of injured greyhound to nearest six months</b>			
1.5 years		1	1
2 years	8	8	16
2.5 years	3	11	14
3 years	10	24	34
3.5 years	1	6	7
4 years		2	2
4.5 years		2	2
5 years	1	2	3
<b>Distance of race in which greyhound was injured in meters</b>			
Under 300	2	4	6
300-399	8	20	28
400-499	7	15	22
500-600	5	12	17
Over 600		1	1
Unknown	1	4	5
<b>Location on track at which injury appears to have occurred</b>			
Soon after start		6	6
Straight	1	6	7
Turn	15	37	52
After finish	2		2
Catching pen	4		4
Unknown	1	7	8
<b>Racing history of injured greyhound</b>			
Average and range of starts in last 30 days	2.6 (0-6)	2.7 (0-8)	2.7
Average and range of starts in last 60 days	4.4 (0-9)	5.4 (0-15)	5.4
Average and range of career starts	31.2 (0-136)	37.8(0-152)	35.9