



RSA

# Cyclist spotlight report: fatalities and serious injuries

2016-2021

Data is current as of 28 April 2023

Prepared by the Research Department of the RSA

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# Background

- This presentation provides an overview of **fatalities and serious injuries among cyclists** for the years 2016-2021.
- This report was prepared using data from the Irish Road Traffic Collision Database, which is based on collision records transferred from An Garda Síochána to the RSA.
- All information in this report **is provisional and subject to change**.
- This means that the fatality and serious injury statistics presented may change at a later date when new information becomes available.
- Note that the information in this report is based on **preliminary findings of the AGS investigation, at an early stage in the process**. It does not contain information on contributory factors from the final completed investigation process.



# Definitions

- A **fatality** is one where death occurs within 30 days of the date of the collision and is not the result of a medical cause or that of a deliberate act (e.g. suicide).
- A **serious injury** is one for which the person is detained in hospital as an in-patient, or any of the following injuries whether or not detained in hospital:
  - Fractures
  - Concussion
  - Internal Injuries
  - Crushing
  - Severe Cuts and Lacerations
  - Severe general shock requiring medical treatment



# Presentation Outline

- Long term-trend in fatalities and serious injuries among cyclists
  
- Summary statistics on cyclist fatalities 2016-2021
  
- Analysis of cyclist serious injuries 2016-2021:
  - Demographics
  - Time of day/Month/Year
  - Location information
  - Collision type and driver actions

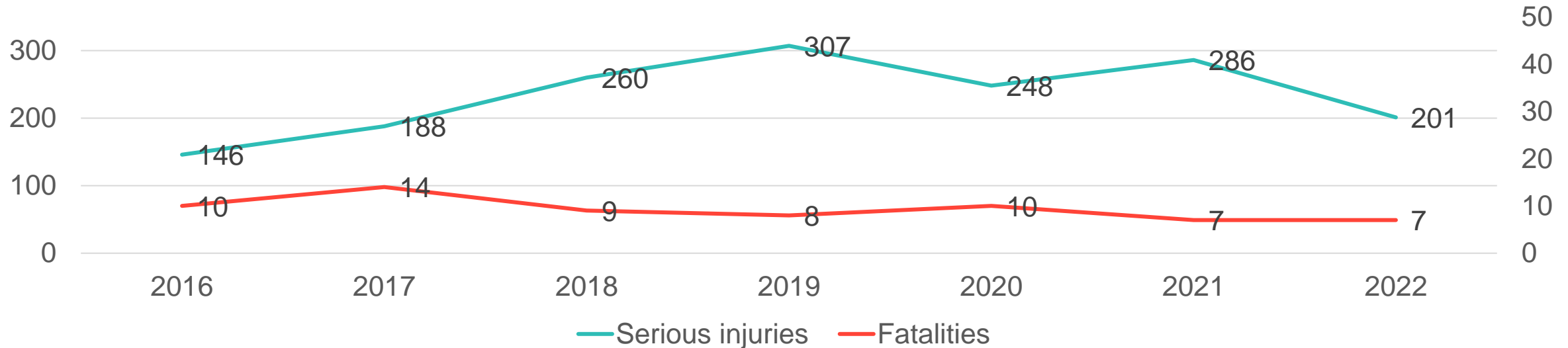


# Trend of cyclist fatalities and serious injuries

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2016-2022



- Between 2016 and 2022, 65 cyclists were fatally injured and 1636 cyclists were seriously injured.
- An average of 9 cyclists were fatally injured and an average of 234 cyclists were seriously injured each year.

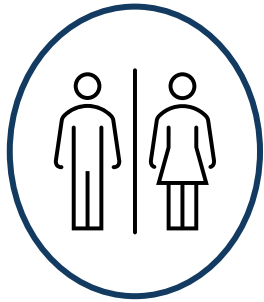
- Cyclists represented 6% of fatalities and 19% of serious injuries during this time period.
- For every cyclist fatality there were approximately 25 cyclists seriously injured.

*Note, figures for 2019-2022 are provisional and subject to change. There can be fluctuations in serious injury numbers until such a time as the data is deemed to be final.*

# Cyclist fatalities, 2016-2021

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## Age and gender

The greatest share of cyclist fatalities was among those aged **46-55 (21%)**.

Cyclist fatalities most likely to be **male (83%)**.



## Time and day

Almost four in five cyclist fatalities occurred between **8am and 8pm (45, 78%)**.

Almost a third (**18, 31%**) of cyclist fatalities occurred Sunday.



## Location

Almost two-thirds of fatalities occurred on higher speed **rural roads (64%)\***.

**Dublin (24%, 14) and Cork (21%, 12)** were the two counties which saw the largest number of cyclist fatalities.

Almost 3 in 10 (29%) fatalities occurred **at a junction**;

*\*An urban road has a speed limit of **60km/h or less**, while a rural road has a speed limit of **80km/h or more***



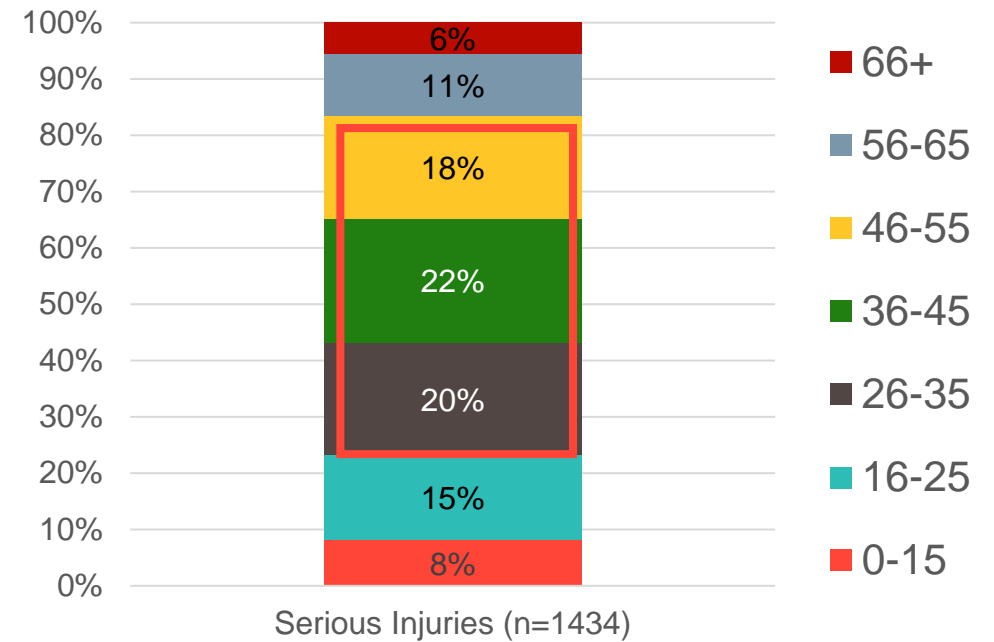
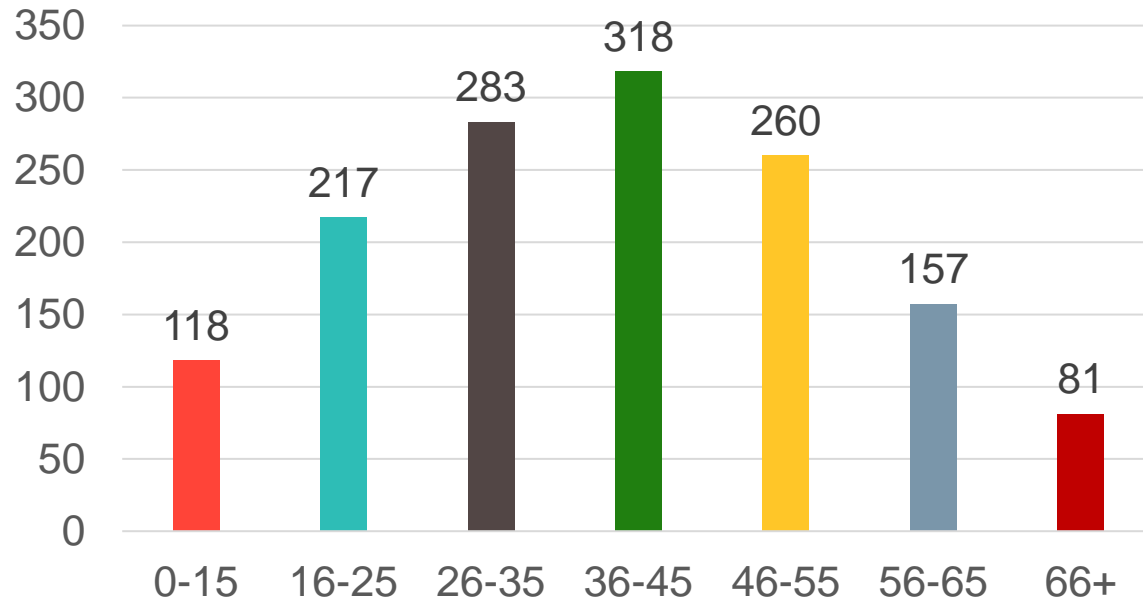
## Collision type

The majority of cyclist fatalities were killed in a collision with another vehicle (81%)

*Note, figures are provisional and subject to change.*

# Cyclist serious injuries by age group

## 2016-2021



Cyclist serious injuries highest among those aged 36-45; 60% of serious injuries among those aged 26-55

*Note, figures are provisional and subject to change. Age of one seriously injured cyclist is currently unknown. Percentages may not add to 100% due to rounding of percentages.*

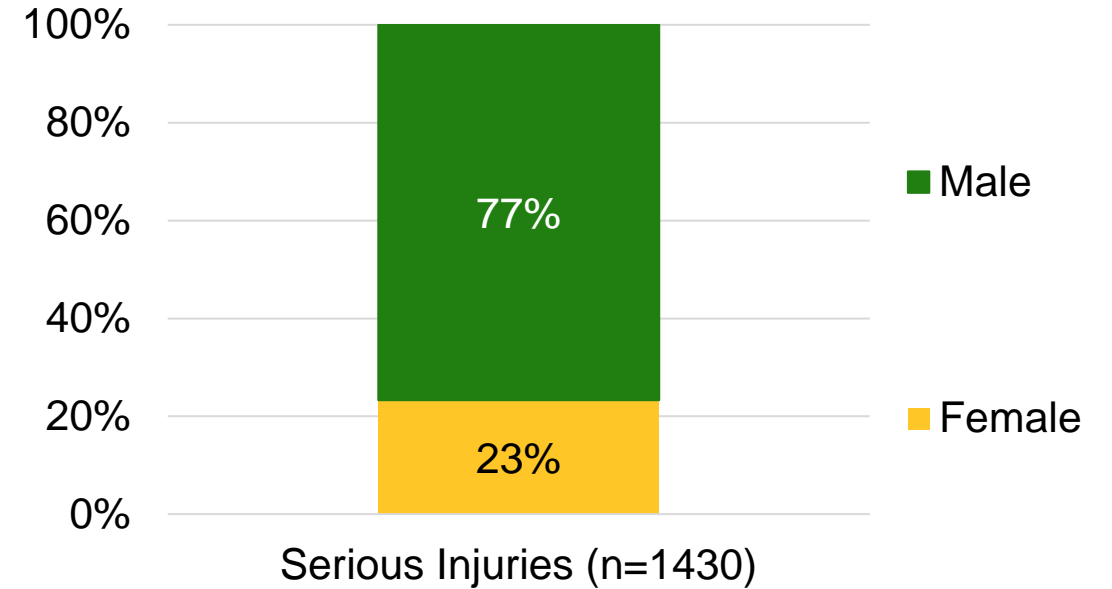
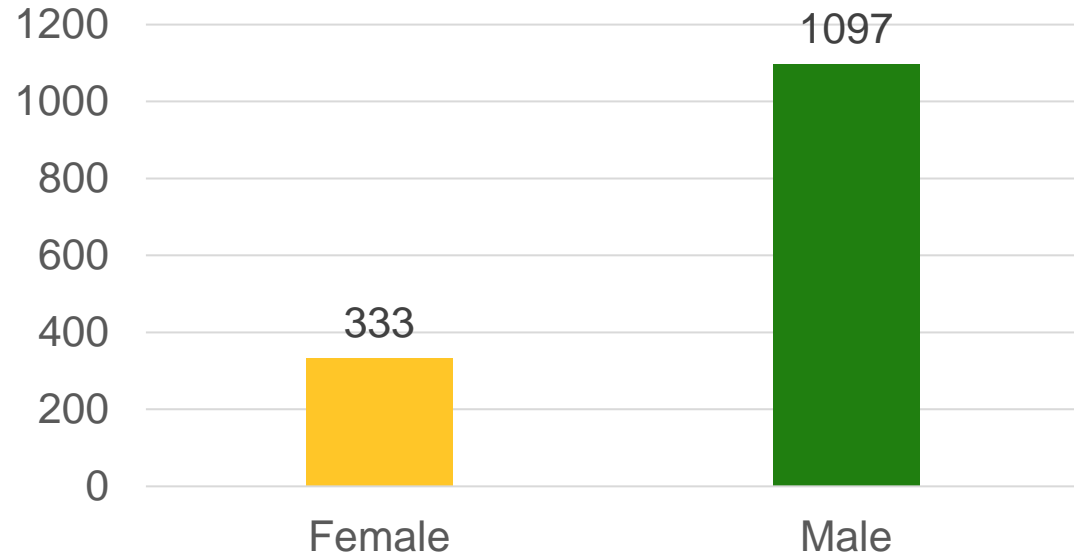


# Cyclist serious injuries by gender

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2016-2021



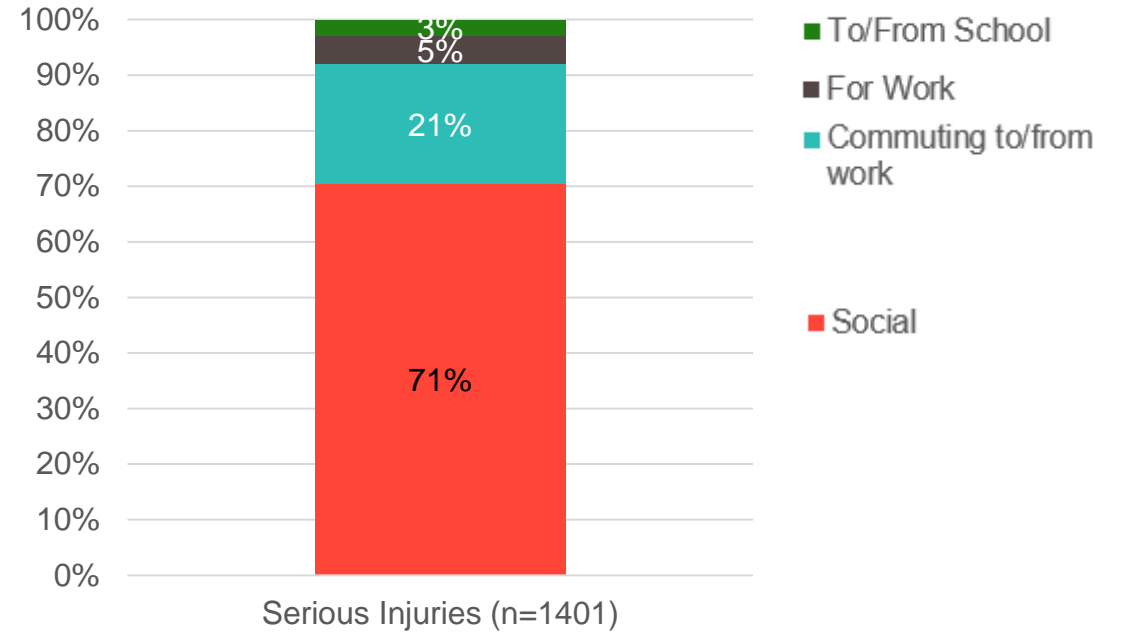
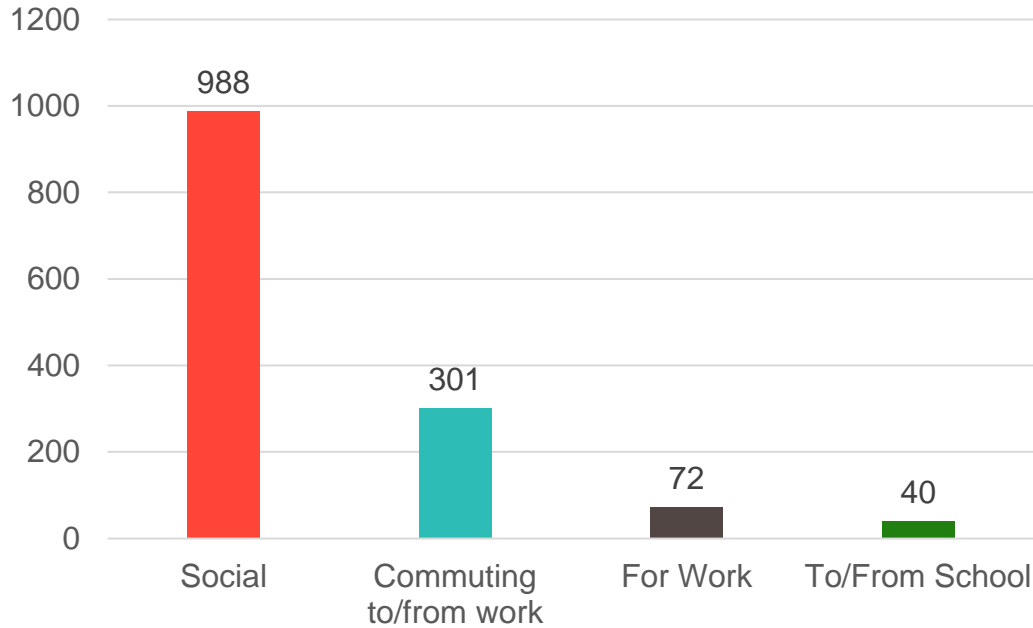
Of cyclists seriously injured, the majority were male.

*Note, figures are provisional and subject to change. Note, gender of five seriously injured cyclists are unknown. Percentages may not add to 100% due to rounding of percentages.*



# Cyclist serious injuries by trip purpose

2016-2021



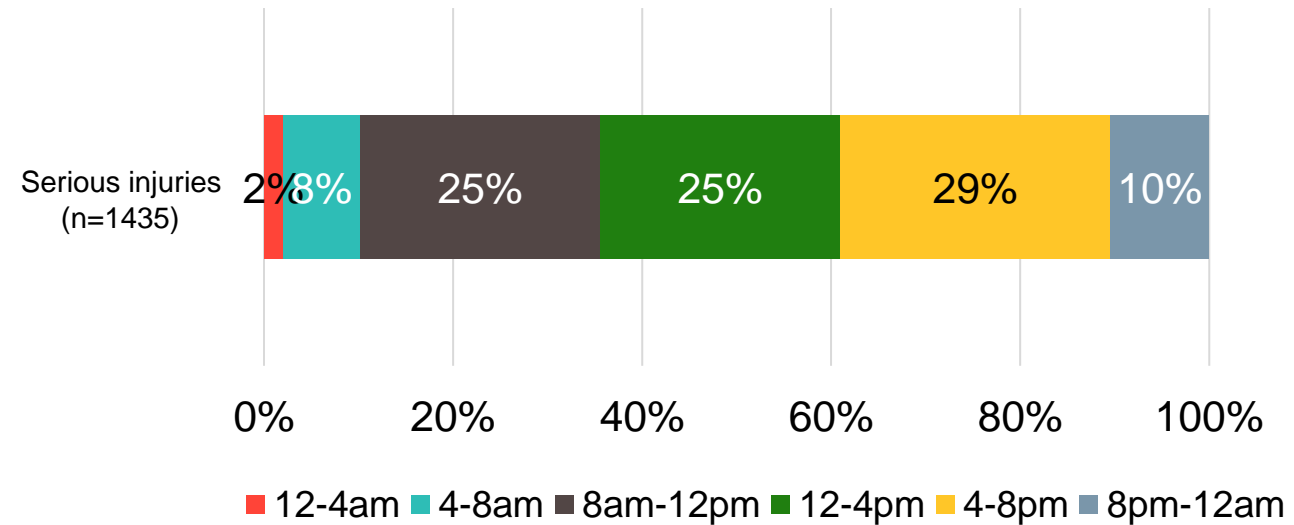
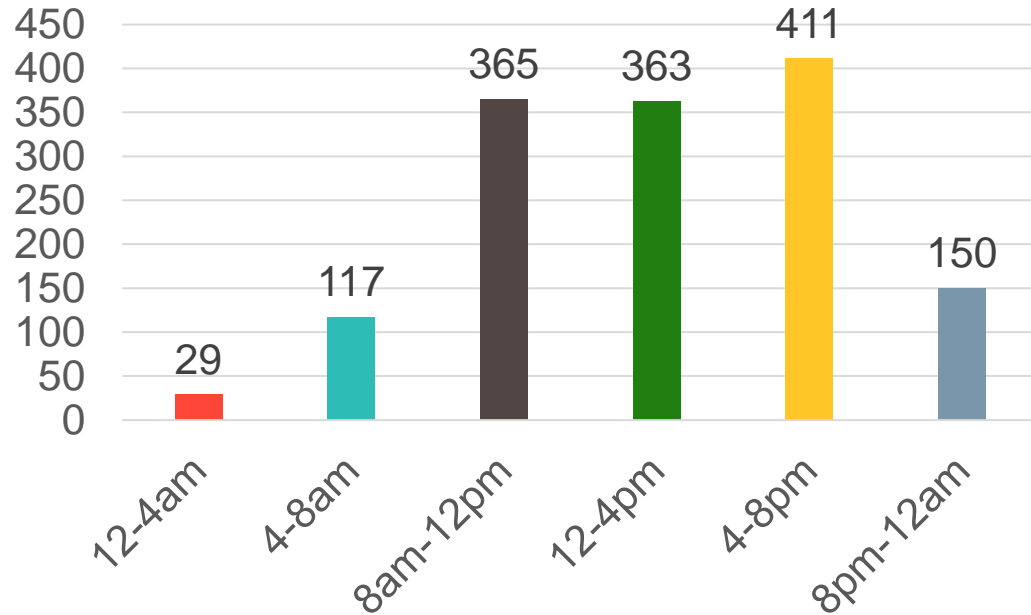
The greatest share of serious injuries was among those cycling for social purposes. Of cyclist seriously injured commuting to/from work, 61% aged 26-45; majority injured in Dublin (84%).

*Note, figures are provisional and subject to change. Note, trip purpose of one fatal cyclist and thirty-four seriously injured cyclists are unknown. Percentages may not add to 100% due to rounding of percentages.*



# Cyclist serious injuries by time of day

2016-2021



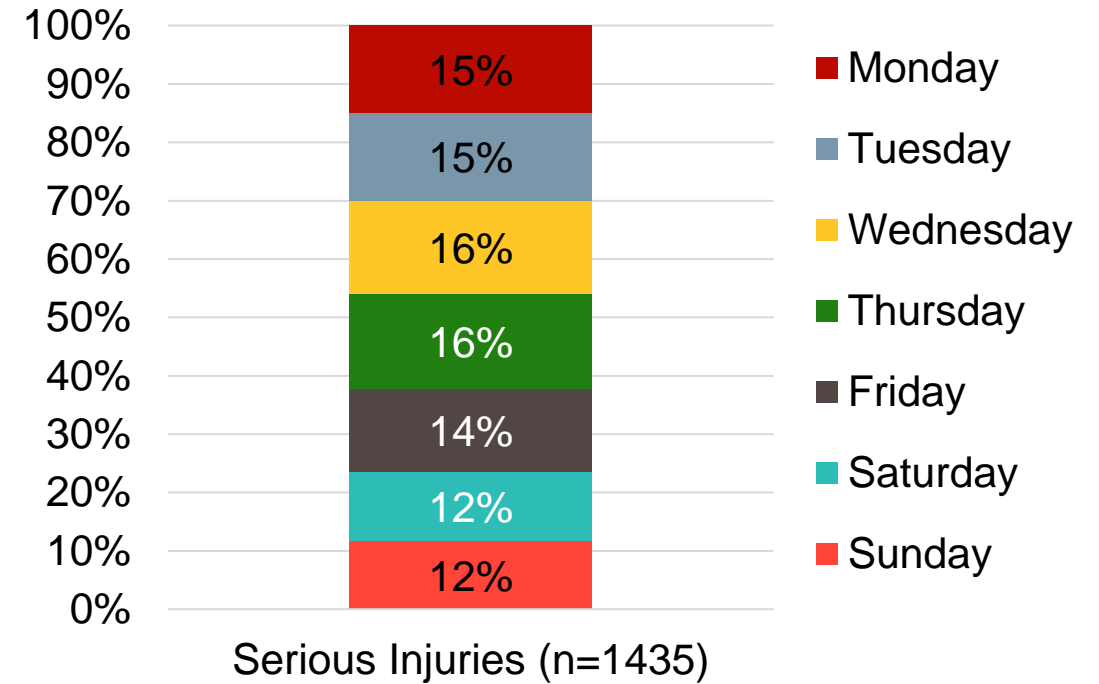
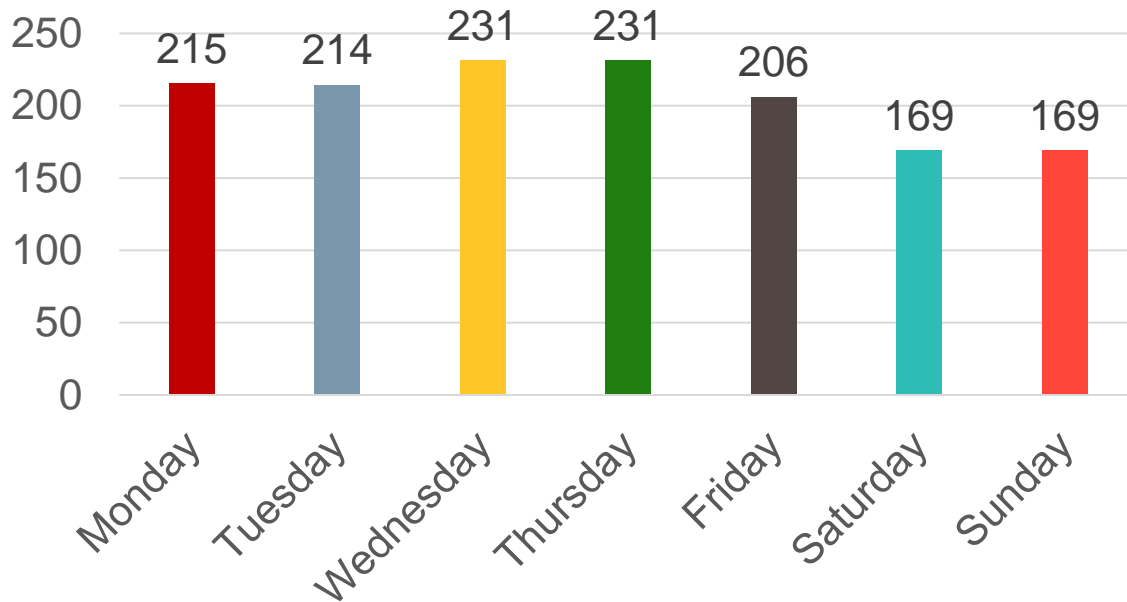
- Almost four in five cyclist serious injuries (1139, 79%) occurred between 8am-8pm.
- Notable proportion of serious injuries sustained late at night and in early morning.

Note, figures are provisional and subject to change. Percentages may not add to 100% due to rounding of percentages.



# Cyclist serious injuries by day of week

2016-2021



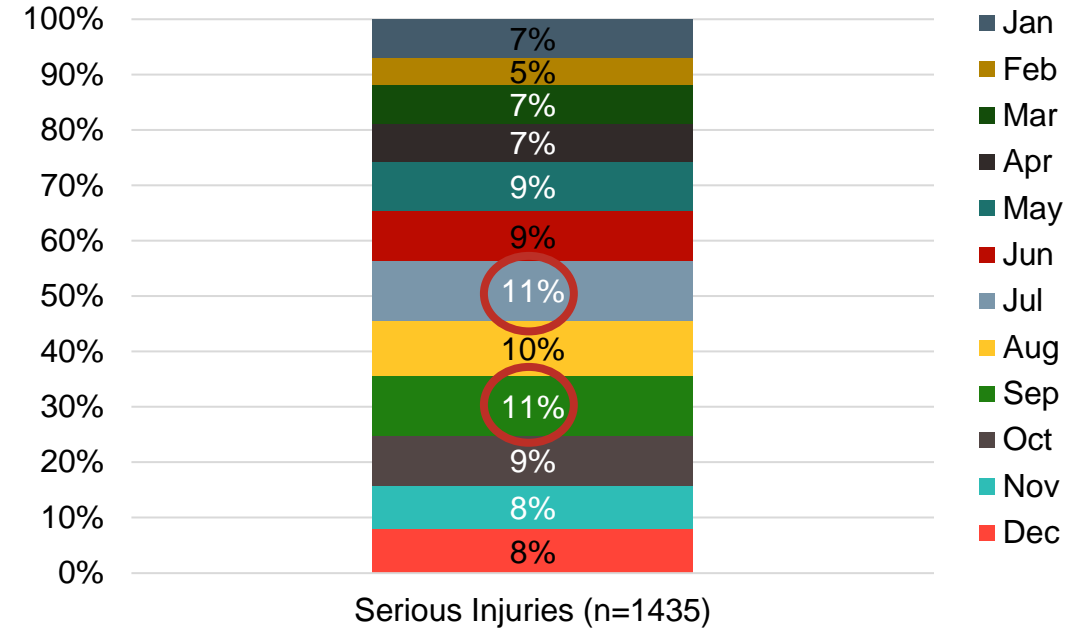
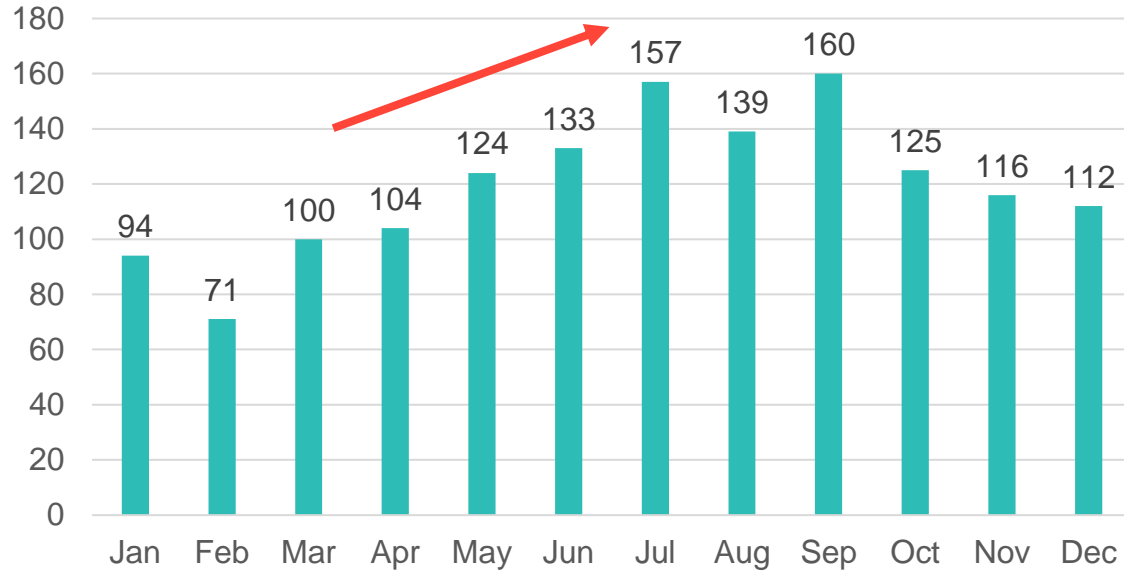
Of serious injuries, 62% (891) occurred early to mid-week (Monday to Thursday). Weekends show lower numbers of injuries.

*Note, figures are provisional and subject to change. Percentages may not add to 100% due to rounding of percentages.*



# Cyclist serious injuries by month of year

2016-2021



Serious injuries among cyclists increased from Spring through to Summer, with highest numbers in July and September.

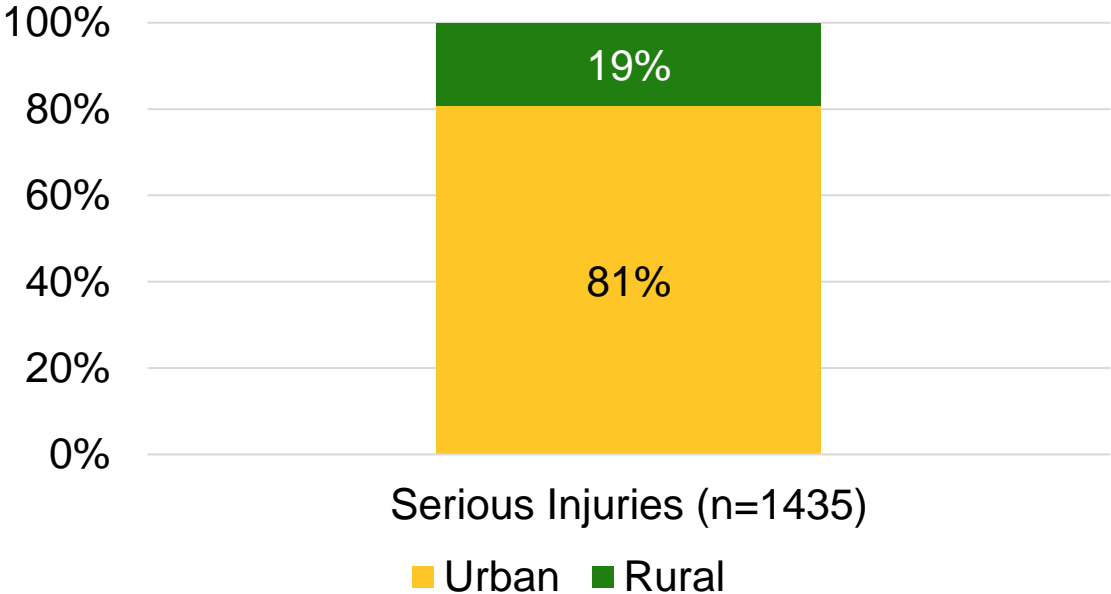
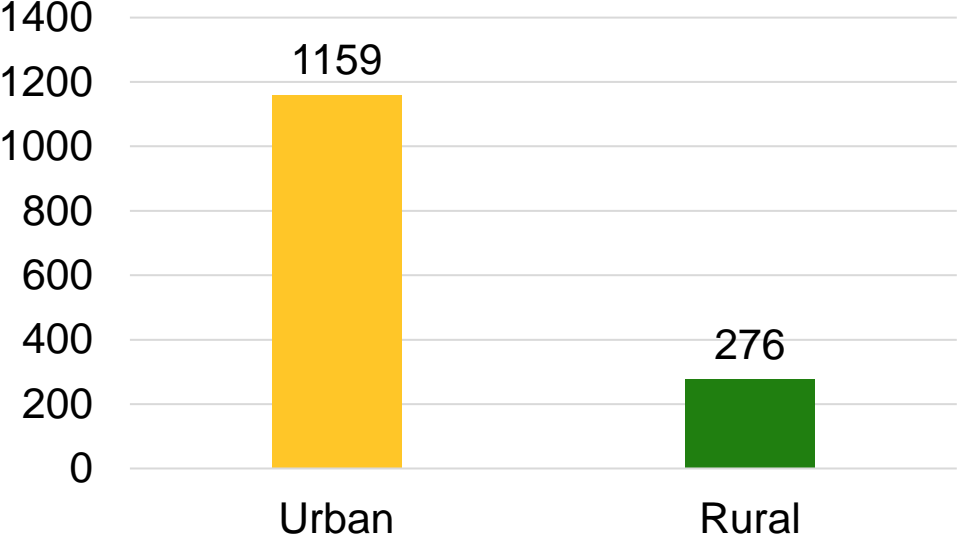
*Note, figures are provisional and subject to change. Percentages may not add to 100% due to rounding of percentages.*



# Cyclist serious injuries by urban/rural road



2016-2021



An urban road has a speed limit of **60km/h or less**, while a rural road has a speed limit of **80km/h or more**.

Four in five cyclist serious injuries occurred on urban roads (1159, 81%).

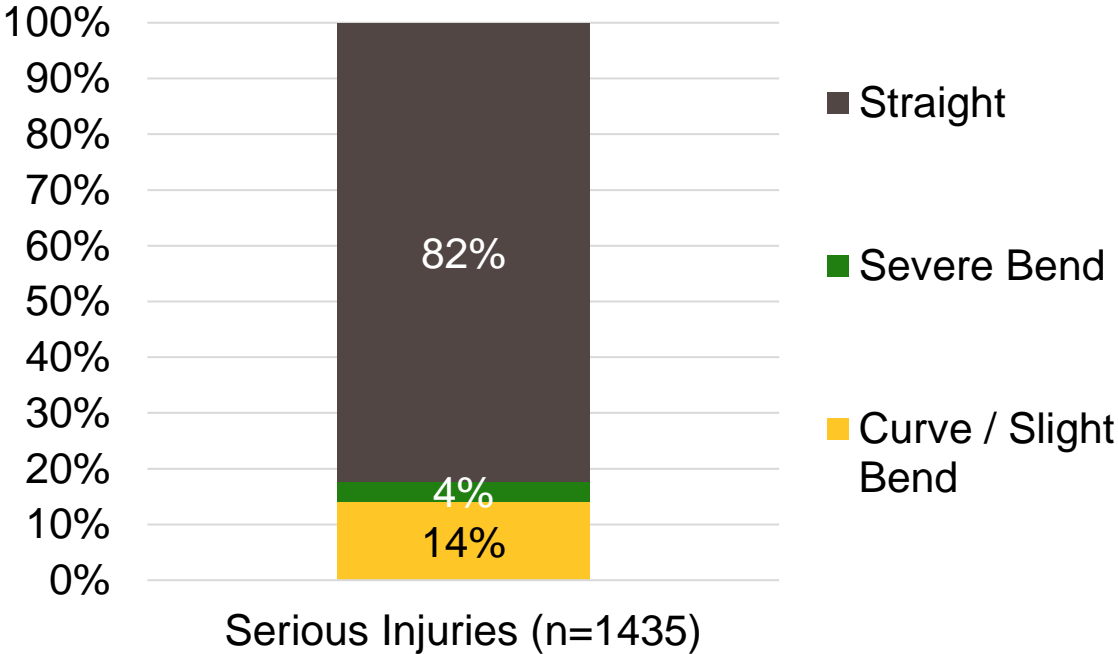
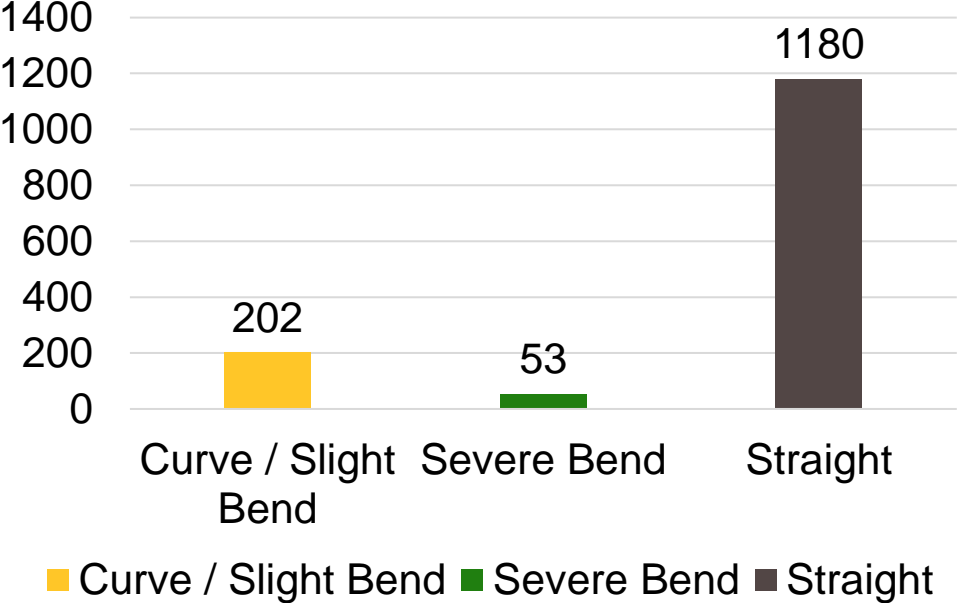
*Note, figures are provisional and subject to change. Percentages may not add to 100% due to rounding of percentages.*



# Cyclist serious injuries by road character



2016-2021



Majority of serious injuries occurred on a straight road.

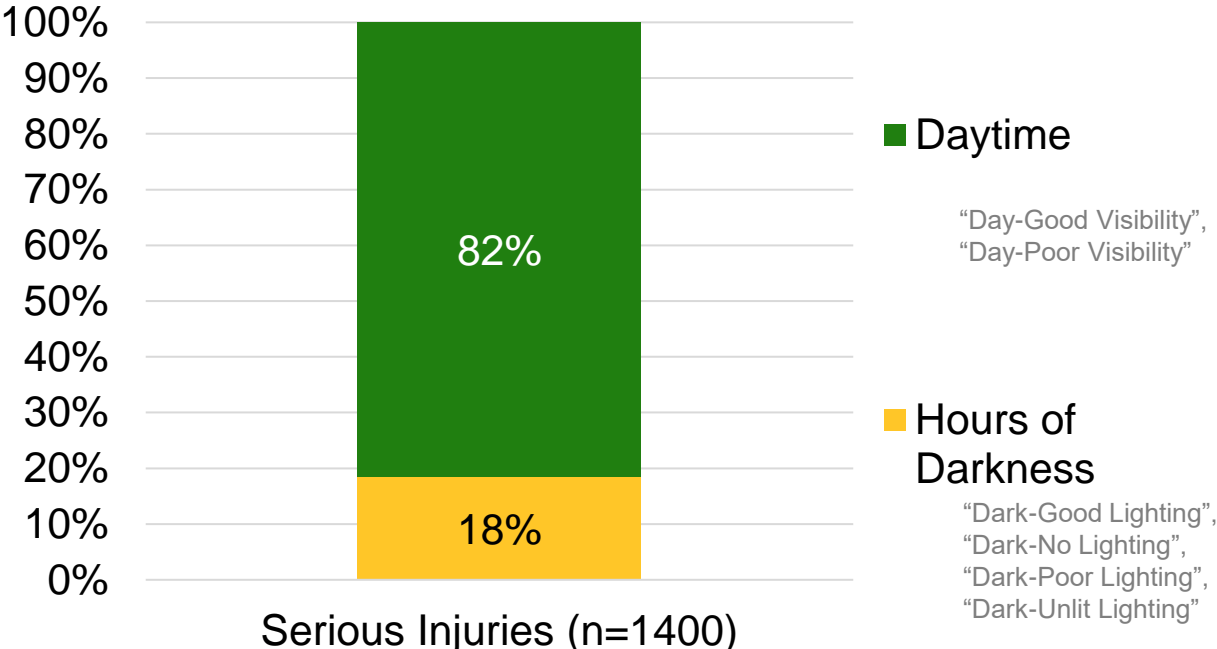
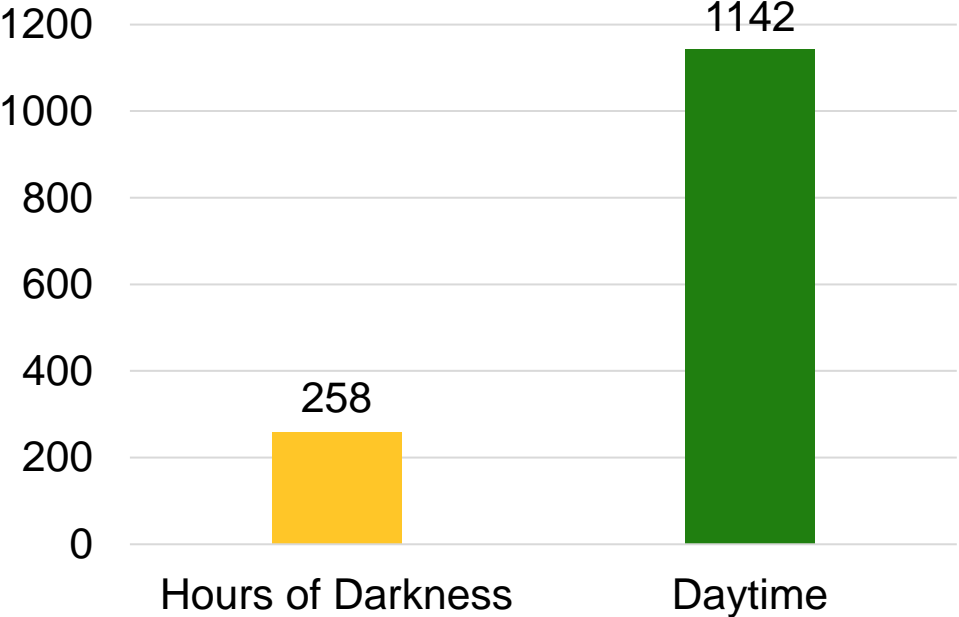
Note, figures are provisional and subject to change. Percentages may not add to 100% due to rounding of percentages.



# Cyclist serious injuries by light conditions



2016-2021



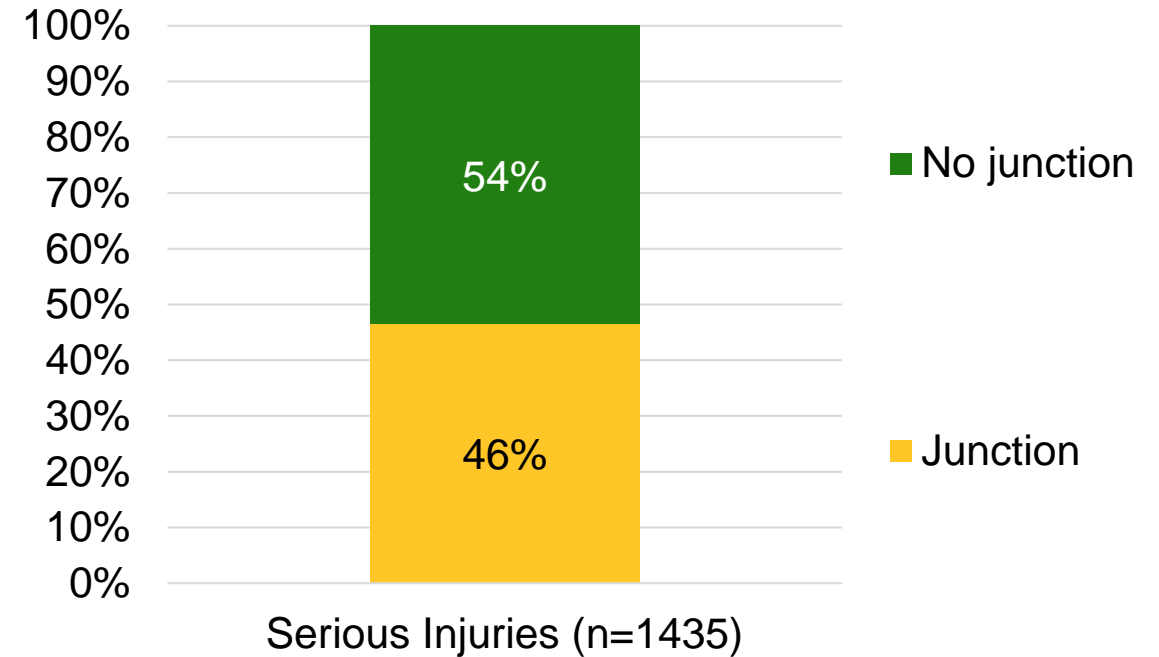
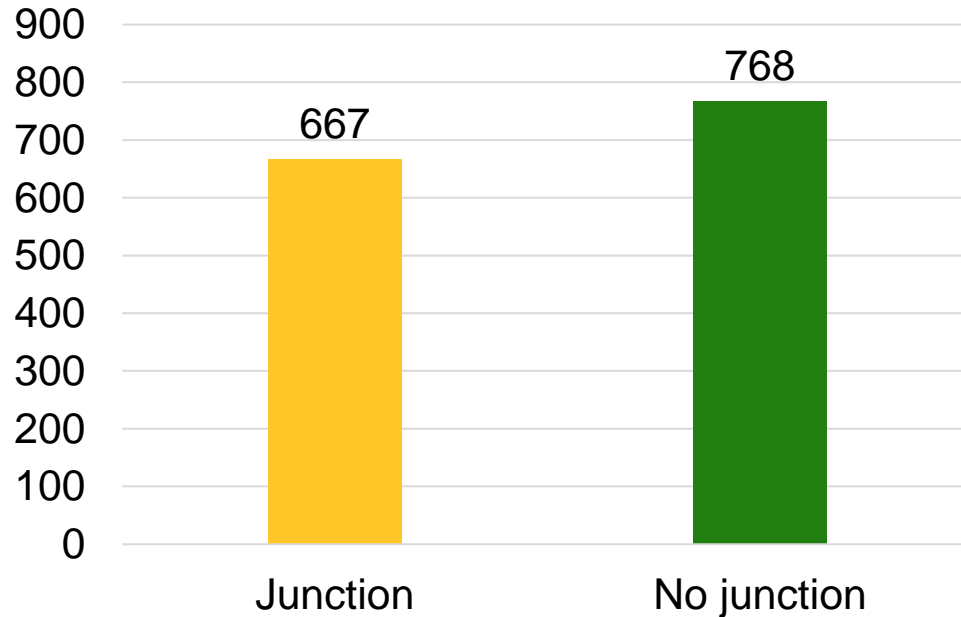
Over eight in ten cyclist serious injuries (1142, 82%) occurred in daytime.

Note, figures are provisional and subject to change. Light conditions unknown for thirty-five seriously injured cyclists. Percentages may not add to 100% due to rounding of percentages.



# Cyclist serious injuries by junction

2016-2021



46% (667) of serious injuries occurred at a junction.  
90% of the serious injuries at a junction were on urban roads.

*Note, figures are provisional and subject to change. Percentages may not add to 100% due to rounding of percentages.*

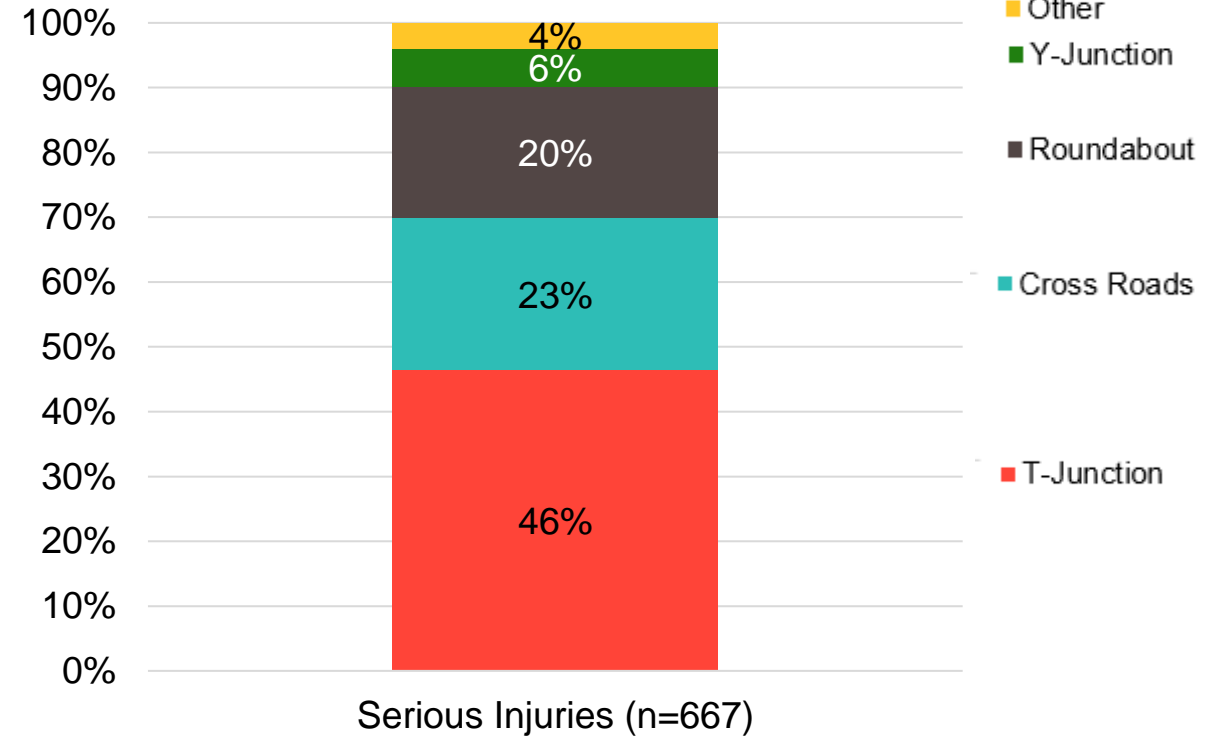
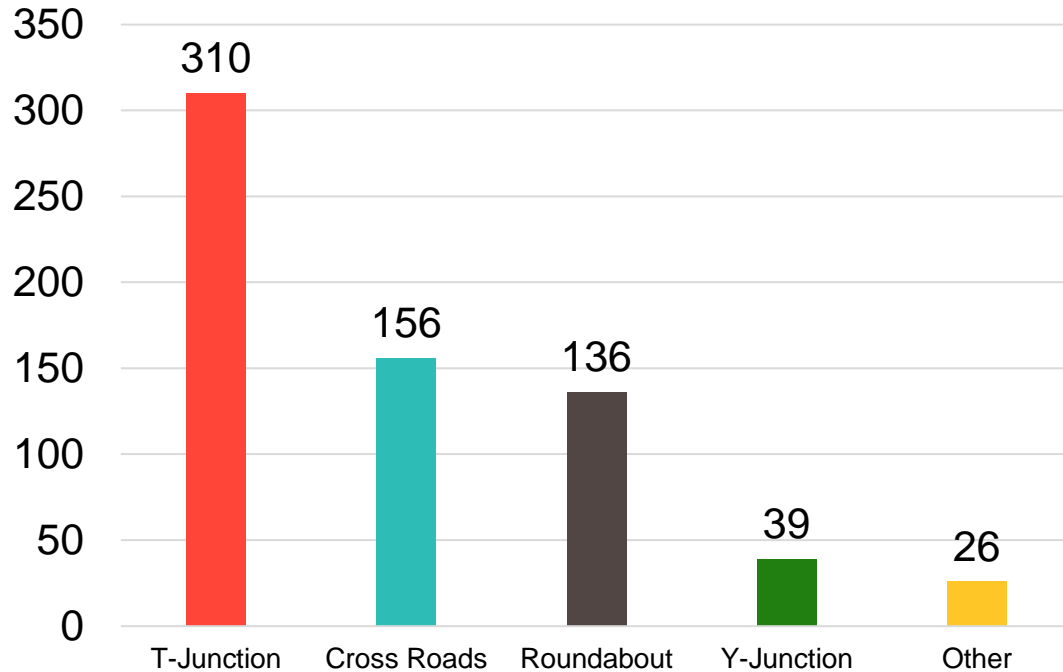


# Cyclist serious injuries at a junction

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2016-2021



T-junctions and cross roads are most frequent junction type where serious injury occurred

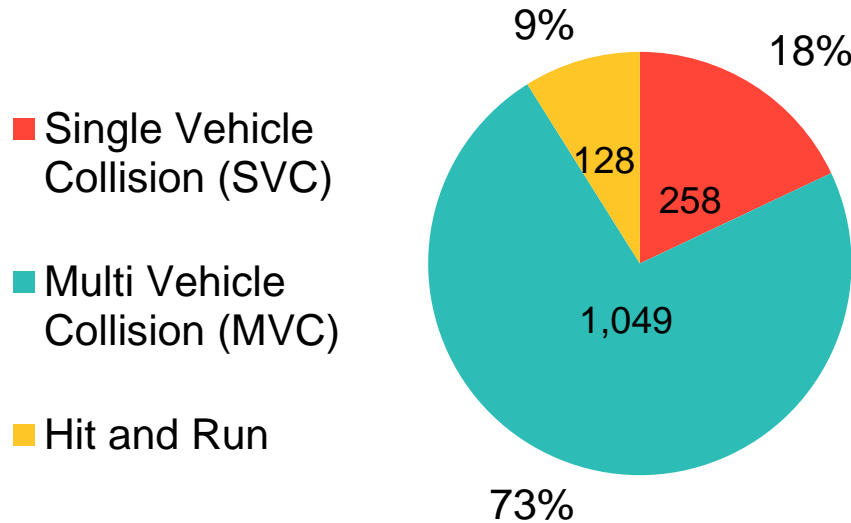
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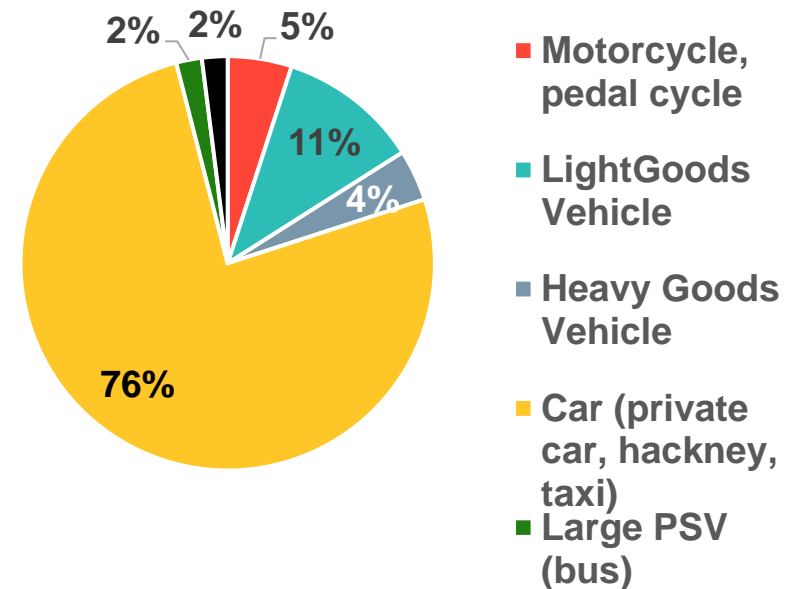
# Cyclist serious injuries by collision type

2016-2021

Serious injuries (n=1435)



Other vehicles involved (n=1,136)






- 18% of cyclists were seriously injured in a single vehicle collision where no other vehicle was involved.
- The driver of the other vehicle failed to remain at the scene in 9% of cases.
- Cars and light goods vehicles most frequently involved in multi vehicle collisions.

Note, figures are provisional and subject to change. A single vehicle collision involved the cyclist's pedal cycle only, while a multiple vehicle collision involved at least one other vehicle. Percentages may not add to 100% due to rounding of percentages.




# Cyclist and Driver Actions

## 2016-2021

### Single vehicle collisions

-  89% of the 258 cyclists seriously injured were driving forward
-  18% of the 258 cyclists seriously injured lost control
-  19% of cyclists in SVCs were injured at a junction

### Multi vehicle collisions

-  88% of the 1,177 cyclists seriously injured were driving forward, while 3% were turning right;
-  46% of other vehicles involved were driving forward, while 15% were turning right, and 11% turning left
-  Failure to observe was the most frequently noted action for the other driver (38%); and for the cyclist (17%)

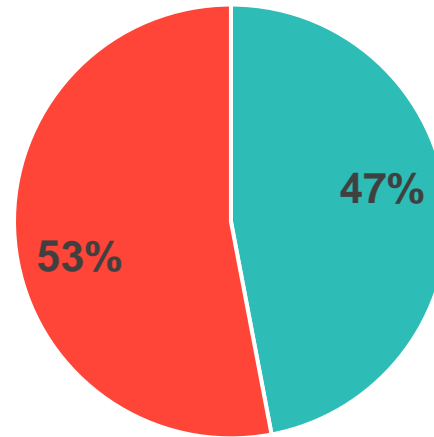
# Cyclist serious injuries in MVCs

2016-2021

## Seriously injured cyclists

### At a junction (53%)

- 53% of cyclists seriously injured in MVCs were injured at a junction
- At these junctions, 22% of the other vehicles were turning right, 17% were turning left, while the majority of cyclists were driving forward (88%)



### Not at a junction (47%)

- Of the other vehicles involved in cyclist serious injuries that did not occur at a junction, 97 (18%) were parked/stationery.
- In these collisions, the cyclist either rear-ended the parked vehicle or collided with an open door or attempted to avoid an open door.

# Cyclist serious injuries by county

2016-2021

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- Dublin and Cork saw the largest number of seriously injured cyclists, with over half of cyclists serious injuries occurring in Dublin (Dublin 54%, Cork 8%).

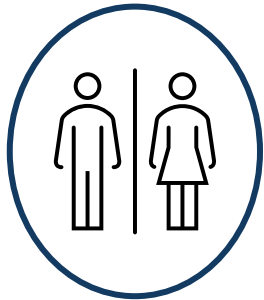
County	Serious Injuries (n=1435)	
	n	%
Dublin	774	54%
Cork	112	8%
Galway	57	4%
Limerick	53	4%
Wicklow	54	4%
Kildare	50	3%
Waterford	37	3%
Donegal	23	2%
Kerry	35	2%
Louth	34	2%
Mayo	29	2%
Meath	27	2%
All other counties		≤1%



# Summary: cyclist serious injuries, 2016-2021

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## Age and gender

Over 4 in 10 cyclists seriously injured were aged 26-45 years.

Seriously injured cyclists were most likely to be **male**.



## Time, day, month

Almost four in five cyclists were injured between **8am and 8pm**.

High proportions of serious injuries **Monday-Thursday** and in **Summer months**



## Location

Four in five serious injuries occurred on **urban roads; over half occurred in Dublin**.

Almost half of serious injuries occurred **at a junction**; majority of injuries sustained on a **straight road**.



## Collision type

Over 8 in 10 cyclists seriously injured in **multiple vehicle collisions**, most commonly with a **car or light goods vehicle**

**Almost 1 in 10** cyclists were seriously injured in a **hit and run**.

*Note, figures are provisional and subject to change.*



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2016-2021

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