

Pedestrian Fatalities on Irish Roads: Examining 2008-2015

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Background

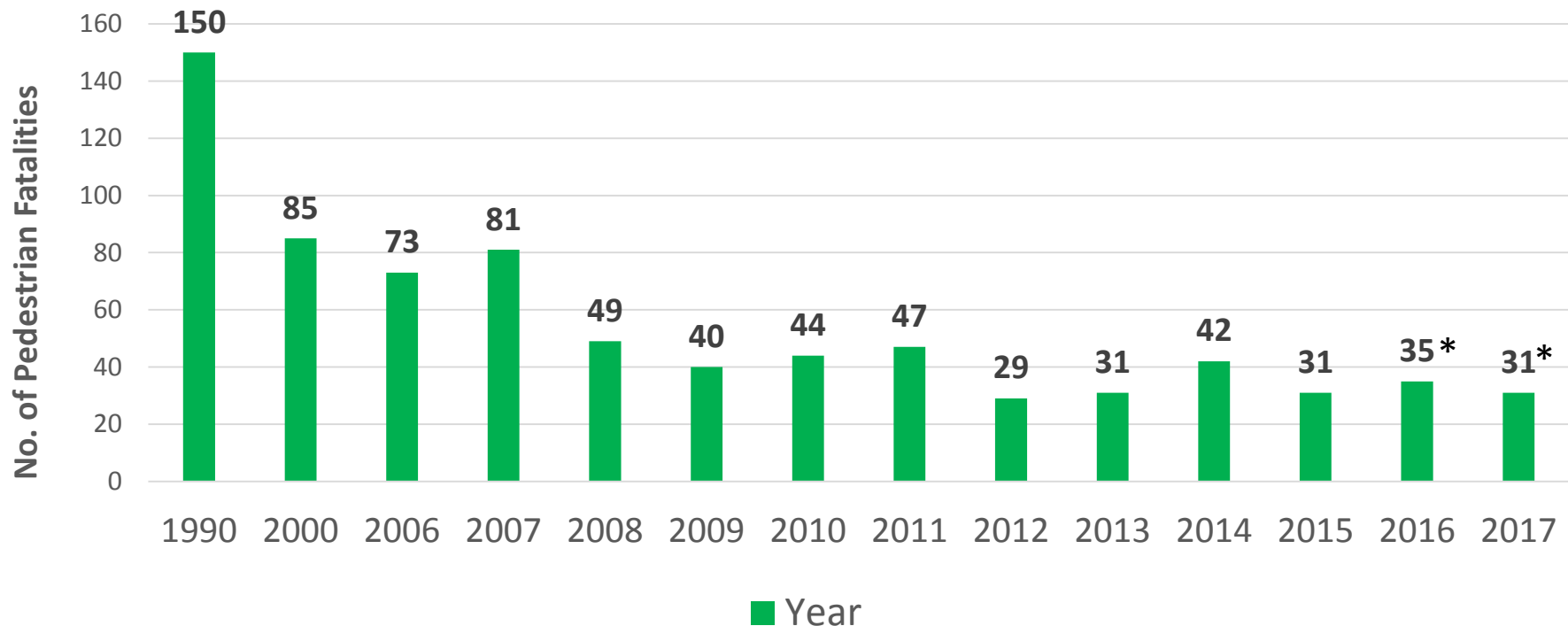
- Pedestrians are a recognised **Vulnerable Road User (VRU)** group.
- This presentation provides an overview of the **preliminary findings** of a detailed **report** underway on pedestrian fatalities.
- The findings of this report will inform an **evidence-based pedestrian safety campaign**, due for release in 2019.
- This presentation has **3 sections**:
 1. Overview of all pedestrian fatalities (2008-2015; Collision Data)
 2. In-depth examination of pedestrian fatalities (2008-2015; Garda Investigation Files & Coronial Files)
 3. Examination of culpability in pedestrian fatalities (2008-2012; Garda Investigation Files).



Pedestrian Fatalities

- Pedestrian fatalities have reduced substantially over the years, but **further reductions** must be achieved.

59% reduction from 2006 - 2017



**These data are provisional and subject to change.*

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Section 1. Overview of Pedestrian Fatalities (2008-2015)



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Road Traffic Collision Database

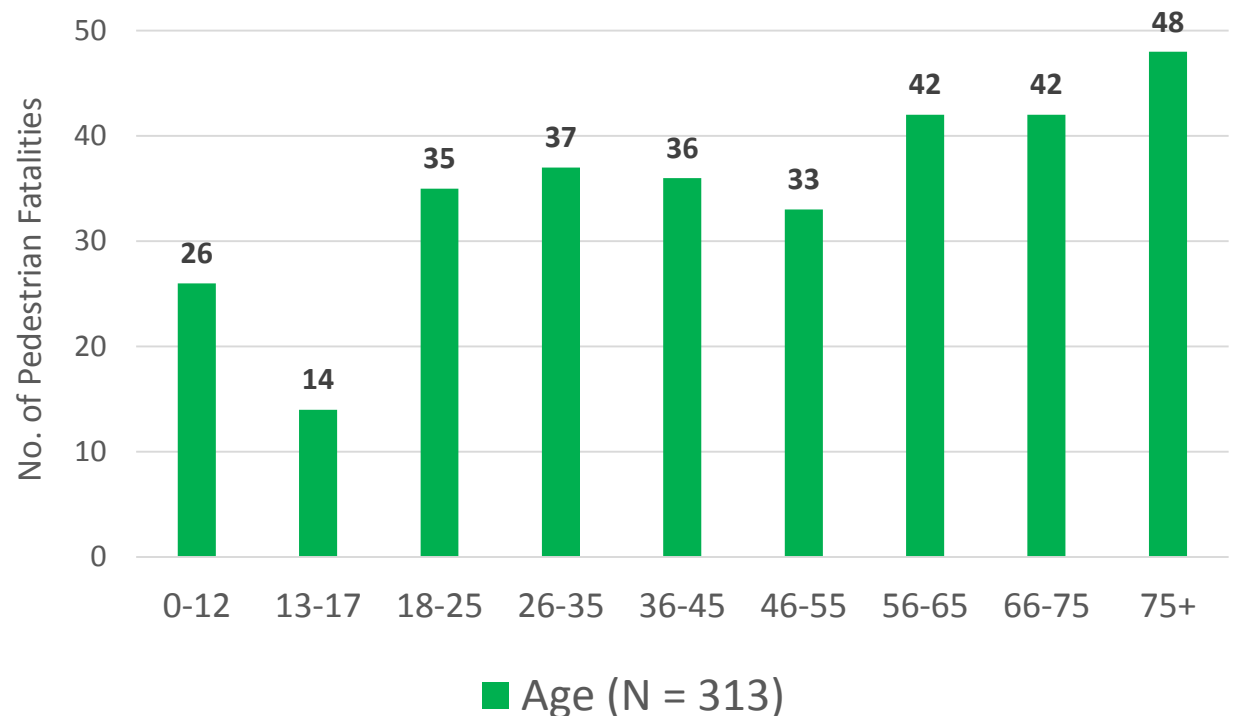
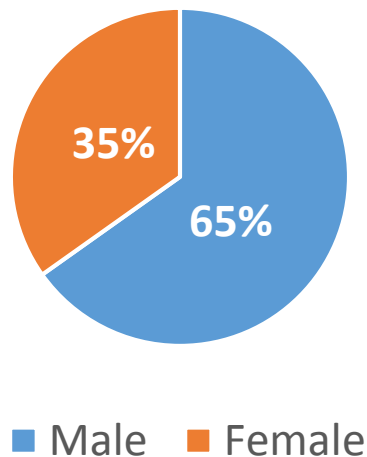
- The **Road Traffic Collision Database** is maintained by the RSA, in collaboration with An Garda Síochána.
- Until 2014, collision data were provided to the RSA via paper CT68 forms. Now, **electronic collision records** from An Garda Síochána are transferred to the RSA on a daily basis.
- These data are typically collected at the scene of a Road Traffic Collision (RTC).
- A **pedestrian fatality** is captured in the database where the fatal collision occurred on a public road, was notified to An Garda Síochána, and the deceased died within 30 days of the RTC.



Pedestrian Fatality Profile

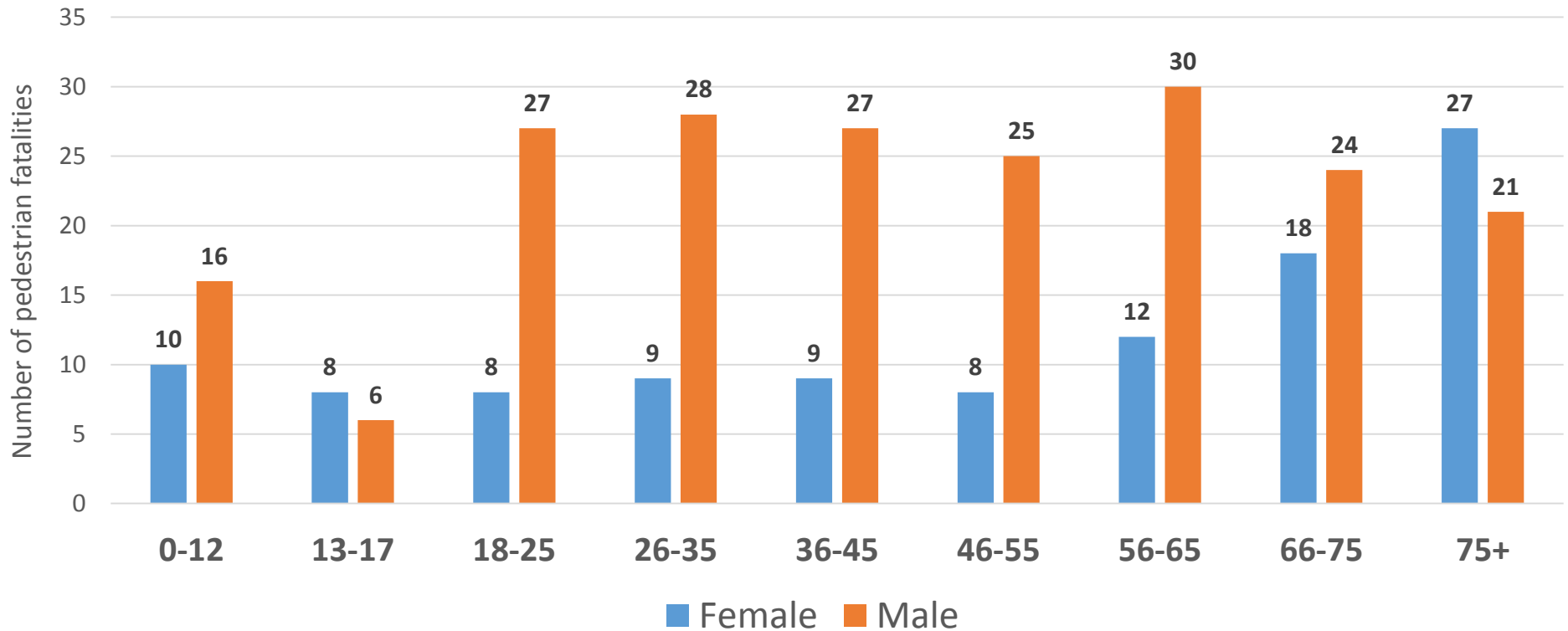
- In 2008-2015, **313** pedestrians were killed in **308** fatal RTCs. Pedestrian fatalities accounted for **19%** of the total road users killed (N = 1621) during this time period.

Gender (N = 313)



Pedestrian Fatality Profile

Gender by Age (N = 313)



Pedestrian Fatality Timeframe (N = 313)



12% took place in **December**. **44%** occurred during **October-January**.

17% took place on a **Sunday**. **47%** occurred during **Friday-Sunday**.

30% took place between **5pm-10pm**.



22% took place between **12am-5am** - a period of lower traffic volume (4% of journeys: 12am-6.59am, CSO National Travel Survey, 2016).

14% took place between **12am-5am** on Saturday and Sunday alone.



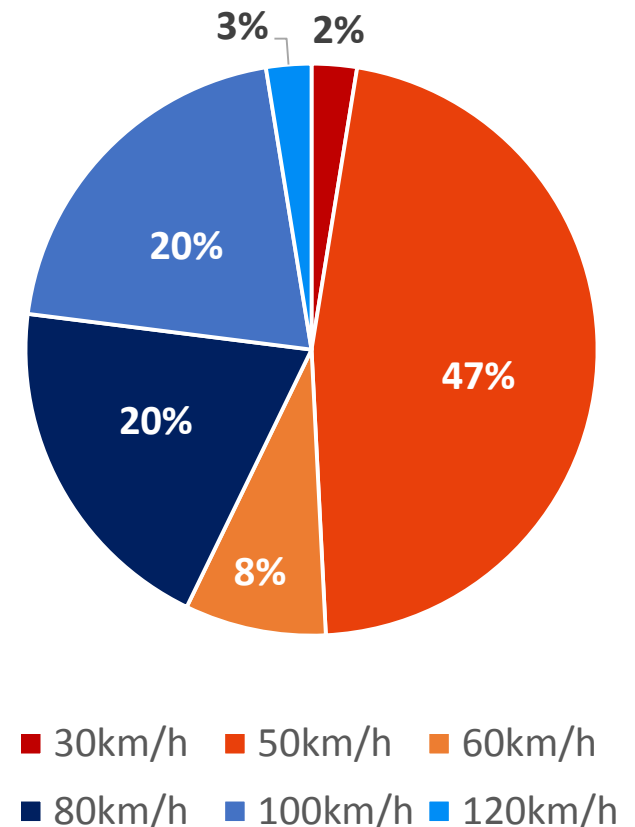
27% took place in **darkness on an unlit road**. **59%** occurred during the **hours of darkness** overall (N = 307).



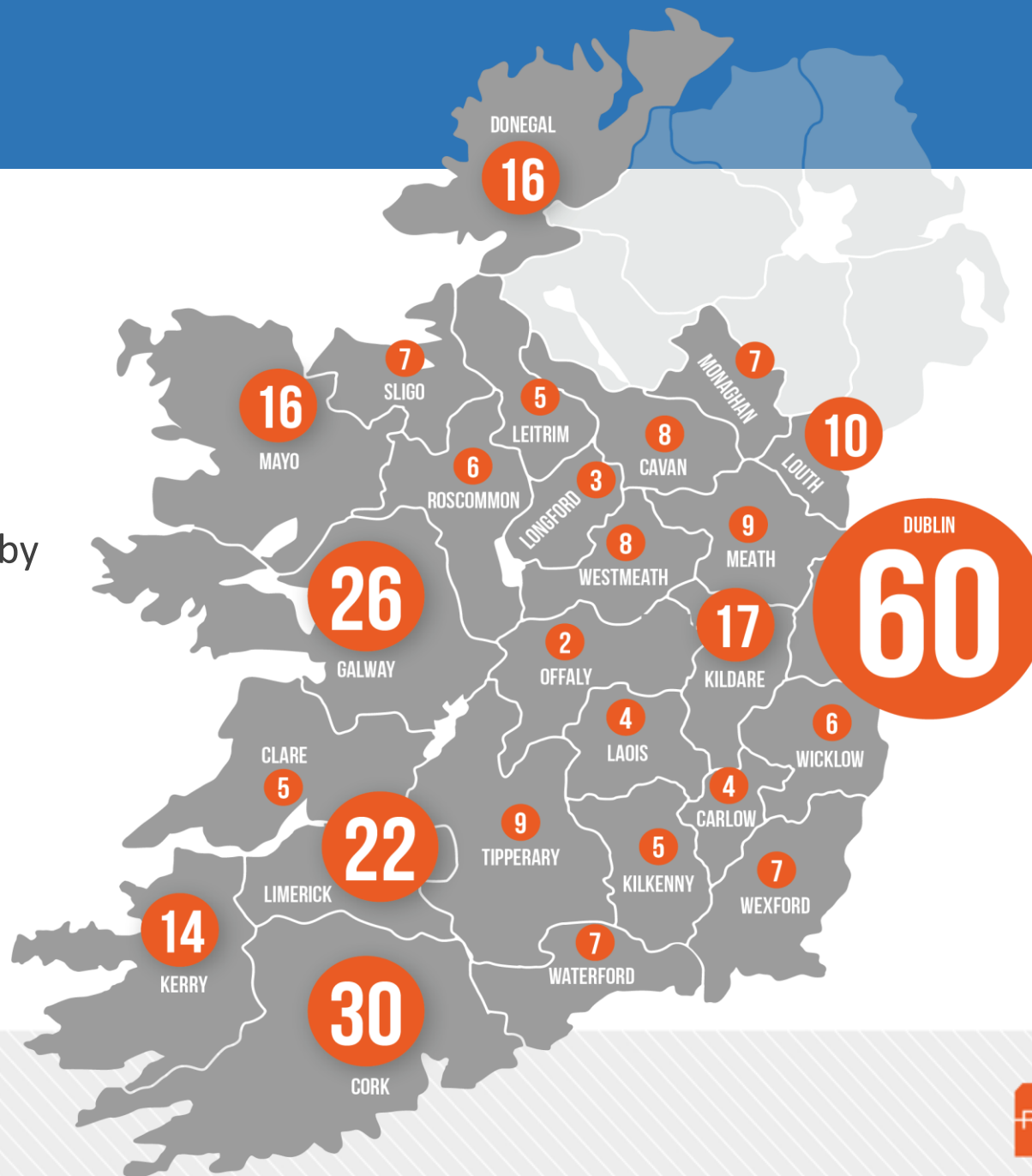
Pedestrian Fatality Location

- The RSA categorise an **urban road** as one with a speed limit $\leq 60\text{km/h}$ (i.e. 30km/h, 50km/h, 60km/h roads).
- A **rural road** is one with a speed limit $>60\text{km/h}$ (i.e. 80km/h, 100km/h, 120km/h roads).
- Overall, **57%** took place on an **urban road**.
- **19%** took place in **Dublin** (88% urban)
- **10%** took place in **Cork** (63% urban)
- **8%** took place in **Galway** (69% urban)

Speed Limit (N = 313)



Pedestrian Fatalities by
County, 2008-2015
(N = 313)



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Section 2. In-Depth Examination of Pedestrian Fatalities (2008-2015)

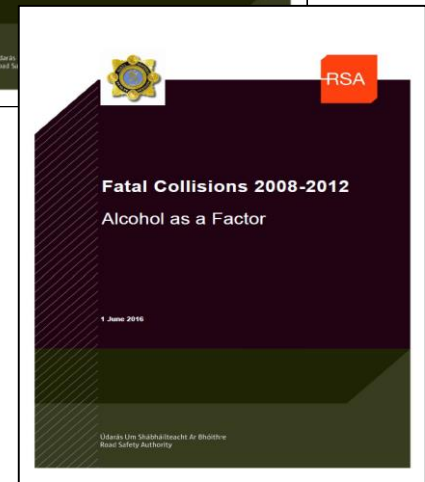
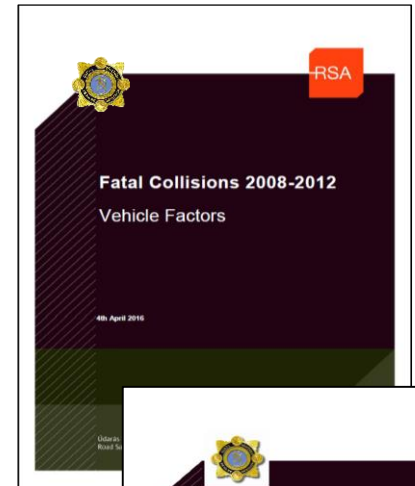


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Garda Investigation Files (2008-2012)

- In 2014-2015, An Garda Síochána granted the RSA access to their available, completed **Investigation Files** of fatal RTCs in Ireland in **2008-2012**.
- These files contain the definitive details of the full circumstances of a fatal collision. They typically contain the following:
 - Garda Investigation Report
 - Forensic Collision Investigation (FCI) Report
 - PSV Report
 - Autopsy Report
 - Toxicology Report
 - Deposition Statement
 - Coroner's Verdict
 - Death Certificate



Coronial Files (2013-2015)

- The **National Drug-Related Deaths Index** (NDRDI) is an epidemiological database maintained by the **Health Research Board** (HRB).
- The HRB collect the data to populate this database from **closed Coronial Files**, stored in Coroner's offices nationwide following an inquest.
- **Action 120** of the Road Safety Strategy (2013 - 2020) involved the extension of the remit of the NDRDI to collect data on RTC fatalities from closed Coronial Files.
- Following a successful pilot in 2014-2015, the HRB have provided RTC fatalities data to the RSA on an annual basis - for **2013, 2014 and 2015** to date.
- These files typically contain the **same components** as the Garda Investigation Files (e.g. FCI and PSV report, toxicology report, autopsy report, Coroner's Verdict etc.).

Pedestrian Actions

- **248** pedestrian fatalities were captured by the Garda Investigation Files and Coronial Files, of the **313** pedestrian fatalities that occurred during 2008-2015: **79% coverage**.
- Of those pedestrian fatalities with a record of:

ACTION (n = 241)

30% - Crossing the road

21% - Failed to observe

9% - lying in road

8% - standing in road

TRIP PURPOSE (n = 213)

86% - Social

8% - Work related (commuting, for work, working on or near road)

HI-VIS WEARING AFTER DARK (n = 96)

98% were not wearing high-visibility clothing.



Alcohol Consumption

THRESHOLD

>20mg/100ml blood or equivalent in urine

Cases where alcohol consumption was confirmed by Gardaí are also incorporated.

PREVALENCE

There was a record of whether alcohol was consumed for 215 pedestrian fatalities.

Of these, **49%** were confirmed to have consumed alcohol.

PROFILE (n = 105)

88% were male

No distinctive high-risk age groups emerged.

PROFILE (n = 105)

82% occurred between 6pm-6am

57% occurred on Fri-Sunday

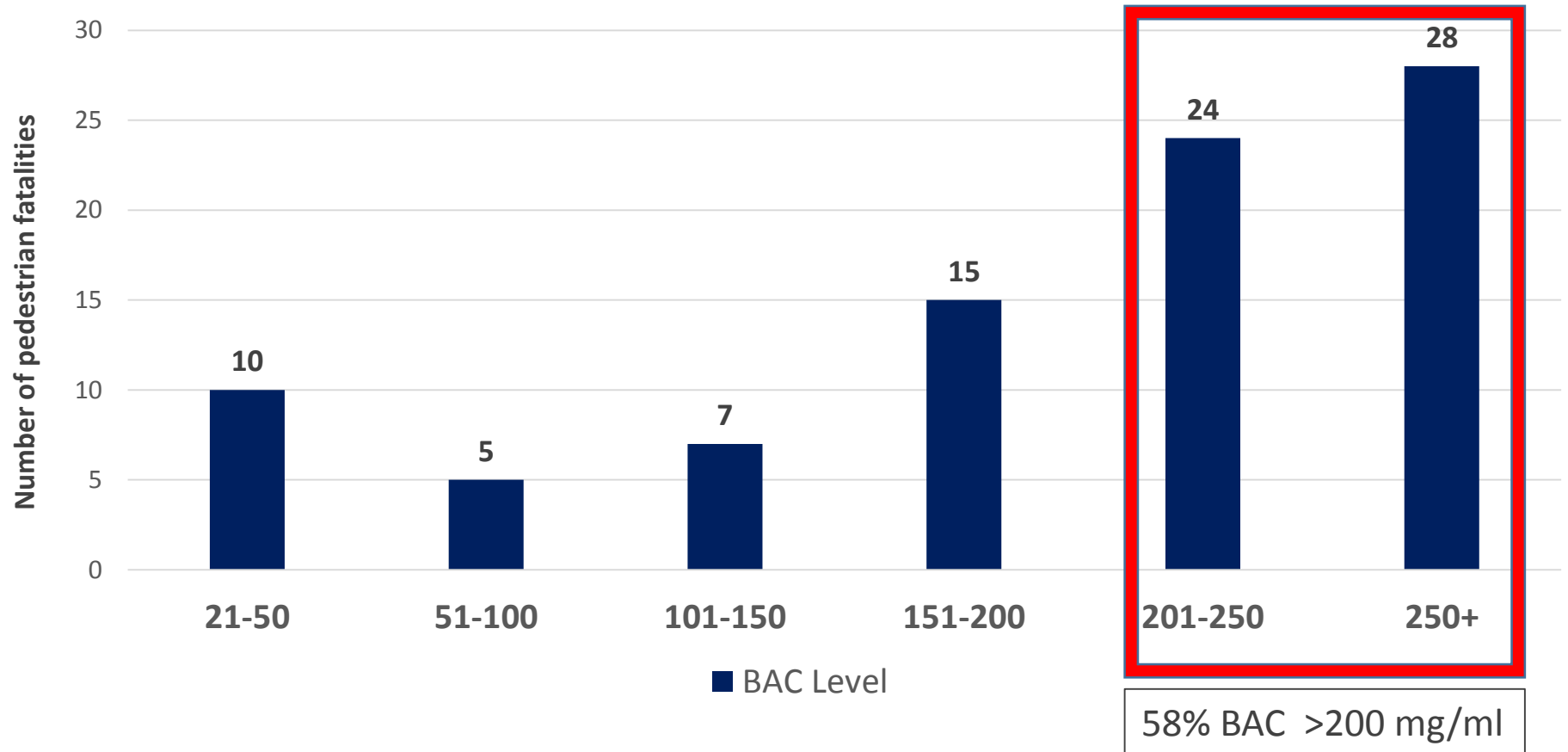
60% occurred on rural roads*

**The RSA categorise a rural road as one with a speed limit of > 60km/h*



Alcohol Consumption

Pedestrian Fatalities BAC levels (n = 89)



Section 3. Culpability (2008-2012)



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Understanding Culpability

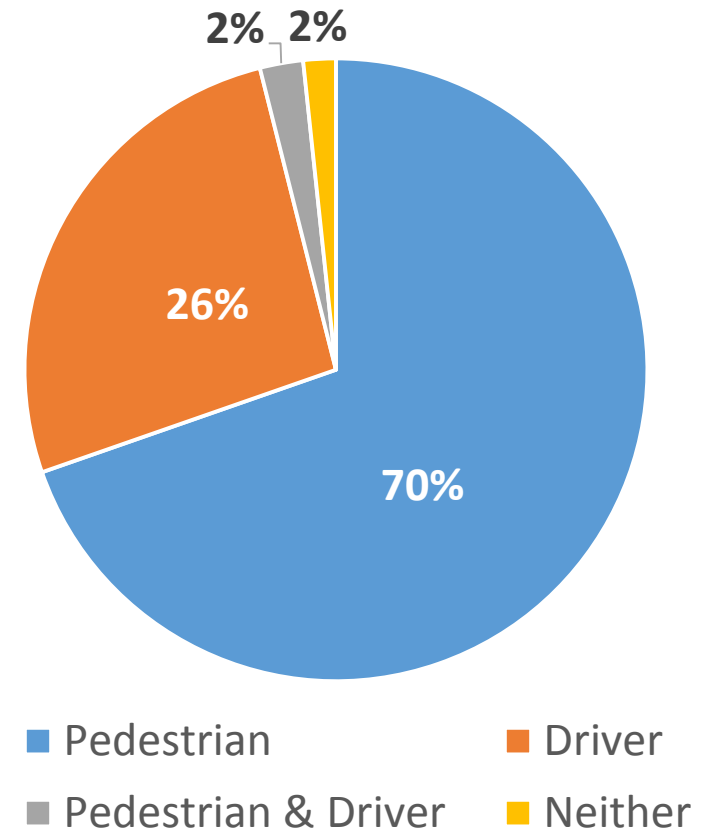
- Culpability in this context **does not refer** to judicial or criminal culpability.
- We examine culpability because we need to **identify the actions** that played a role in the lead up to a collision. We can then target those actions in interventions.
- **Anyone** can make an error while using the roads. For VRUs in particular, such as pedestrians, these can have tragic consequences.
- The **culpability** of the parties involved in pedestrian fatalities was based on the body of work completed using the Garda Investigation Files (2008-2012).
- In some instances, **no culpability** may be determined (e.g. hit and run), and in others, multiple road users can be **partially culpable**.



Culpability

- There were Garda Investigation Files data for **178** of the **209** pedestrian fatalities across 2008-2012 - **85%** coverage.
- While the report will focus on culpable drivers and pedestrians, for the purpose of this presentation, this section will examine the **49 drivers** who were recorded as culpable or part-culpable in total.
- The **limitations** of examining this small sample of culpable drivers must be acknowledged.
- Culpability will be captured from the **Coronial Files** going forward, to increase the data available.

Culpability (n = 178)



Culpable Driver (n = 49)

- Of those culpable drivers with a record of:

INSURANCE (n = 44)

75% - had insurance

LICENCE (n = 42)

95% - had a licence

TYPE (n = 39)

77% - full licence

13% - learner permit

10% - disqualified

GENDER (n = 47)

85% - male

AGE (n = 48)

27% - 18-25

21% - 26-35

19% - 36-45

VEHICLE TYPE (n = 47)

68% - Car

26% - Goods
vehicle*

6% - Other

ACTION (n = 46)

54% - failed to
observe

15% - lost control

TRIP PURPOSE (n = 45)

62% - Social

22% - For work

16% - Commuting

**Incorporates light and heavy goods vehicles, from vans to goods vehicles >2 tonnes, rigid.*



Culpable Driver (n = 49)

24% of culpable drivers were **speeding**.



17% were driving a vehicle with a **defect** (e.g. tyres, brakes; n = 48 records available).

15% were confirmed to have consumed **alcohol** (n = 47 test records available).
The majority of those with a positive toxicology had a **BAC level >100mg/ml**.



Conclusions



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Key Findings

- **Older pedestrians** are a particularly vulnerable group.
- **October - January** is a high risk period for pedestrian fatalities, as are **weekends (12-5am)**.
- The majority of pedestrian fatalities take place in **darkness**, with very low levels of **high-visibility clothing** being worn*.
- The majority of pedestrian fatalities take place on **urban roads**.
- **A third** of pedestrians were **crossing the road**, and **1 in 5** had **failed to observe**.*
- **1 in 2** pedestrian fatalities were confirmed to have consumed **alcohol**.*
- **Half** of culpable drivers **failed to observe** before the fatal pedestrian collision*. A **quarter** of culpable drivers were **speeding***.



**Of those with a record of the particular behaviour.*

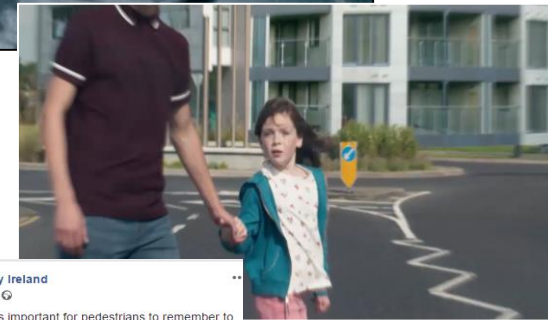
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Pedestrian Safety and the RSA

Previous campaigns have included:

- Multiple **national media, social media** and **education campaigns** in primary and secondary schools (e.g. Streetsmart, Seatbelt Sheriff & Hi-Glo Silver, Streetwise).
- **‘Take One for the Road’** with Vintners Federation of Ireland (Dec 2017 - approx. 50,000 high-visibility vests available across 4,000 rural pubs nationwide).
- **‘Be Safe, Be Seen’** with ESB Networks (21st Dec 2017 - and during 2017, 110,000 high-visibility vests distributed to children starting school).



 Road Safety Authority Ireland
September 25 at 1:00 PM · 

As the evenings get shorter it is important for pedestrians to remember to wear high visibility gear when out walking or jogging in the evenings.
#BeSafeBeSeen



Pedestrian Safety and the RSA

- The RSA fully support **30km/h speed limits** in built-up areas, and the use of **Intelligent Speed Assistance (ISA)**.
- The RSA will be using the information presented today, and a **survey** on pedestrian safety to inform the design of an **evidence-based, pedestrian safety campaign (2019)**.
- Protecting VRUs will be a core focus of the next **Road Safety Strategy (2021-2030)**.



Thank you for your attention

If you have any further questions, please contact me at: akervick@rsa.ie

