



# Alcohol as a Factor in Fatal Collisions

Ireland 2008-2012

## Background

- Over the time period 2008 to 2012, 983 fatal collisions occurred on Irish roads claiming the lives of 1,077 people.
- This report examines 867 of the fatal collisions which occurred during this time period.
- Focus on alcohol as a factor in fatal collisions.

# Methodology

- Report is based on an analysis of the completed Garda investigation file where the full circumstances of the collisions are available. Access was granted by An Garda Síochána to the completed Investigation File produced for each collision. The file contains two main reports:
  - An Garda Investigation Report
  - Forensic Collision Investigation Report
- The RSA collected the data in the Garda National Traffic Bureau.
- Of the 867 collisions analysed, 330 collisions were classified as per the investigation report as having alcohol as a contributory factor. This represents 38% of all collisions analysed for the time period.
- These collisions were classified as an **alcohol related collision** where the driver, motorcyclist, pedestrian or cyclist had a record of alcohol consumption.
- Changes to legislation.

## Alcohol as a Contributory Factor

330 is based on both *confirmed* alcohol results for the driver, pedestrian or cyclist and/or the attending Garda's opinion.

In certain circumstances, it was not possible to test the suspected driver for alcohol for reasons such as the driver leaving the scene, difficulty in identifying the driver at the scene, medical consent for alcohol testing being refused and refusing to provide a sample.

In these circumstances the Garda's opinion at the scene, witness statements and in some instances admission by the driver of alcohol consumption indicated alcohol as a contributory factor for the collision.

## Alcohol as a Contributory Factor

Of the 330 collisions, 222 (67%) drivers, 28 (9%) motorcyclists, 81 (25%) pedestrians and 4 (1%) cyclists had consumed alcohol prior to the collision.

**29%** of all 867 collisions involved at least one **driver or motorcyclist** with a record of alcohol consumption prior to the collision.

A further **9%** of the 867 fatal collisions involved a **pedestrian** who had consumed alcohol.

At the time of the analysis a record of a toxicology report was available in the file for 198 (79%) of the 250 drivers and motorcyclists.

There was a confirmed presence of alcohol in the file for 67 (83%) of the 81 pedestrians who had consumed alcohol prior to the collision.

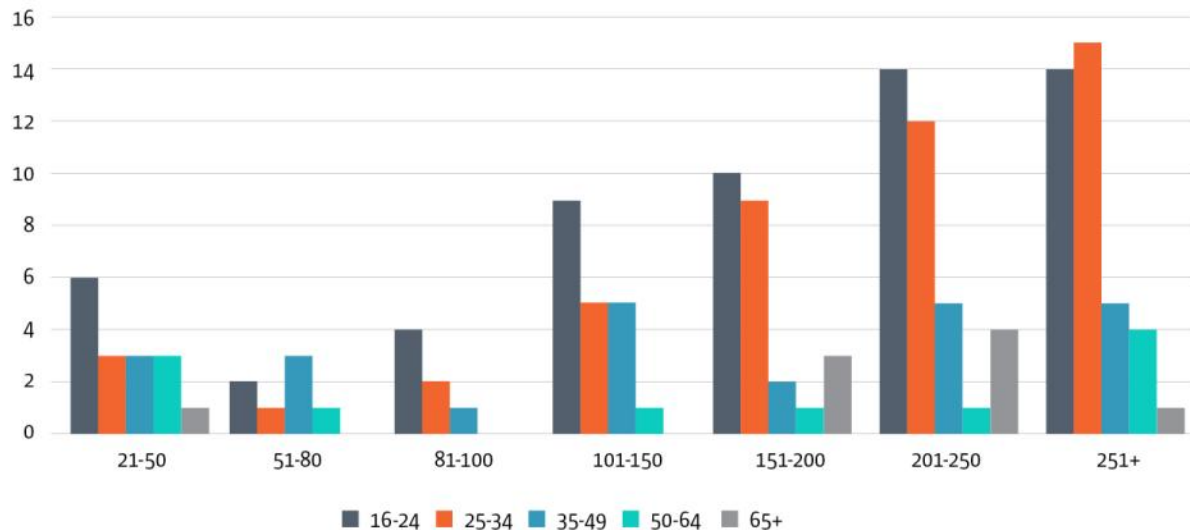
## Level of Alcohol

- **Of the 198 drivers with a confirmed presence of alcohol, 174 (70%) were over the prevailing legal limit at the time of the collision.**
- **Of all 867 collisions analysed 174 (20%) involved a driver over the legal limit at the time of the collision.**
- **Half (50%) of all drivers and motorcyclists** with a confirmed presence of alcohol had a blood alcohol level in excess of 201mg This equates to **over four times the current drink driving limit.**
- A quarter of drivers (26%) compared to 23% of motorcyclists had a blood alcohol level recorded in excess of 251 mg. This indicates that a quarter of drivers were **five times over the current legal limit** and a fifth of motorcyclists were **five times over the current legal limit** at the time of the collision.

## Level of Alcohol

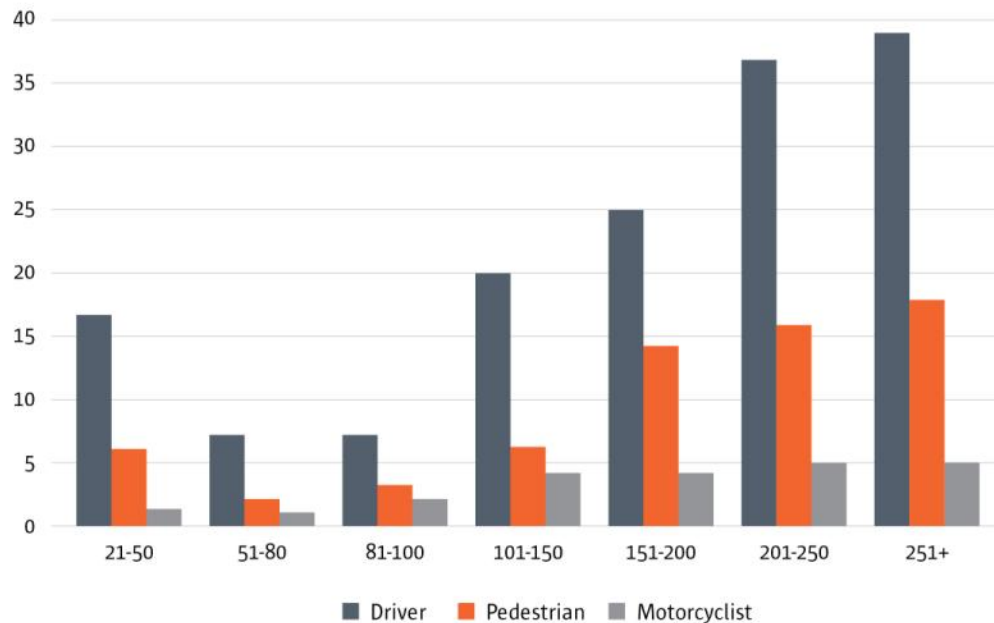
- Almost half (47%) of the drivers aged between 16 and 24 years and 57% aged 25 to 34 years had a BAC in excess of 201mg.
- Almost a third (31%) of the motorcyclists aged between 25 to 34 age group had a BAC of 201 to 250mg.
- A quarter (25%) of pedestrians had a BAC in excess of 201mg and a further 28% had a BAC in excess of 251mg. This highlights that **over half (52%) of the pedestrians were on the road with a BAC in excess of 201mg.**

## Blood Alcohol Level by Age Group





## Blood Alcohol Results by Road User



## Type, When and Where

### Type



Half of all single vehicle and a quarter of pedestrian collisions involved alcohol



24% of private car drivers, 24% of van drivers, 29% of motorcyclists and 28% of tractor drivers consumed alcohol

## Type, When and Where

### When



Overall, over half (58%) of the 330 alcohol related collisions occurred between 9pm and 5am with a particular peak between 2am and 3am



There was a peak in collisions for a driver between 2am and 3am and peak between 5pm and 6pm for motorcyclists



Over half (53%) of pedestrians were killed between 11pm and 6am



Almost a third occurred on a Sunday. Almost two thirds occurred on the weekend days Friday, Saturday and Sunday. Increased from 9pm on a Friday night to 6am on a Monday morning



The top three months for all alcohol related collisions were February, March and October



Pedestrian fatalities peaked in February and October. In general more pedestrians were killed over the winter months



More drivers crashed in February, March and October compared to July and May for motorcyclists

## Type, When and Where

### Where



Of all 330 collisions, Cork, Galway, Dublin and Donegal accounted for over a third (36%) of all collisions where alcohol was a contributory factor



Almost half (48%) occurred on a Regional road, a third (34%) on a National route



Half the collisions occurred where the speed limit, at the time, was 80km per hour



However, 11% of the collisions on a regional and national road occurred in a 50km zone indicating an urban environment



Overall, the speed limits would suggest 19% of alcohol related collisions occurred in an urban area and 81% in a more rural environment

## Who was driving

- The majority of drivers who had consumed alcohol were male. Almost half (43%) of the drivers who had consumed alcohol were aged between 16 and 24 years.
- Overall, three quarters (74%) of the drivers (motorcyclists included) who had consumed alcohol were aged between 16 and 34 years.
- Almost half of the drivers of a private car who had consumed alcohol were aged between 16 and 24 years.
- By contrast the majority (57%) of motorcyclists who had consumed alcohol were aged between 25 and 34 years.
- Those aged 16 to 24 years were more likely to have been in a single vehicle collision and a pedestrian or cyclist collision.

# Driver Pre Crash Behaviour

## Reason for Trip, Insurance and Licence:

- The majority (91%) of the drivers who had consumed alcohol were on the road for social purposes, however, 3 were driving for work at the time of the collision.
- Almost a third (31%) of the drivers who had consumed alcohol had no insurance and 16% had no record of a licence at the time of the collision.
- Of the 165 recorded as having a licence and who had consumed alcohol, 75% held a full licence, 15% were on a Learners Permit and 7% were disqualified at the time of the collision.
- Of the 25 on a Learner Permit, 12 were on a first permit (3 unaccompanied), 3 were on a second permit and two were recorded as expired. Six of the drivers had held their Permit for less than 6 months.
- Two of the 123 drivers recorded as holding a full licence had a previous history of disqualification and two of the eleven drivers who were disqualified at the time of the collision had a history of disqualification.

## Driver Pre Crash Behaviour

### Drivers:

- 217 drivers were in a vehicle which would have required the use of a seatbelt. Of these, 111 were recorded as not wearing a seatbelt and 96 (86%) were killed.
- Overall, 196 drivers in the 867 collisions analysed were recorded as not wearing a seatbelt at the time of the collision, 111 (57%) had consumed alcohol prior to the collision.

### Passengers:

- 87 of the 145 who had consumed alcohol were not wearing a seatbelt and 44 (51%) were killed.
- Of all 174 passengers in the 867 collisions recorded as not wearing a seatbelt 87 (50%) had consumed or were suspected of consuming alcohol.

**These figures may indicate the consumption of alcohol affected drivers and passengers decision to use a seatbelt.**

## Driver Pre Crash Behaviour

- The primary manoeuvre being performed at the time of collision is coded as driving forward (90%).
- The main action indicated for the driver who had consumed alcohol was loss of control of the vehicle (66%) and a further 14% crossed to the wrong side of the road.
- Of the 164 collisions where loss of control was cited, the majority (137) occurred in single vehicle collisions.
- Twenty eight (11%) of the 250 collisions cited alcohol as the **sole** contributory factor. An additional 3 had alcohol and a vehicle factor noted.
- The main other factors cited in the remaining fatal speed related collisions involved speed, a combination of illicit or prescription drugs, dangerous behaviour such as road racing, performing tricks on the road, being distracted and inexperience where the driver was at the very early stages (some within 3 months) of their driving career.



## Number of People Killed or Injured

286 people were killed and 69 were seriously injured

|              | FATAL | SERIOUS | MINOR |
|--------------|-------|---------|-------|
| Driver       | 169   | 26      | 51    |
| Motorcyclist | 25    | 1       | 2     |
| Passenger    | 83    | 42      | 61    |
| Pedestrian   | 8     | -       | -     |
| Cyclist      | 1     | -       | -     |
| Total        | 286   | 69      | 115   |

- Four cyclists and 76 pedestrians were killed where their own alcohol intake was a contributory factor in the collision.
- Of the 169 drivers who were killed, 155 (92%) were the driver who had consumed alcohol.
- As a result of a collision where alcohol was the sole contributory factor, 30 people were killed.
- 178 were killed in a single vehicle collision and 24 were seriously injured. Forty nine passengers were travelling in the car with someone who had consumed alcohol and were killed.



**38%**  
alcohol-related collisions.



**29%**  
of all 867 collisions involved **at least one driver or motorcyclist** with a record of alcohol consumption prior to the collision.



**9%**  
of the 867 fatal collisions involved a pedestrian who had consumed alcohol.



Half of all drivers and motorcyclists over **four times the current drink driving limit**. A quarter of drivers were **five times over the current legal limit** and a fifth of motorcyclists were five times over the current legal limit.

## Alcohol as a Factor in Fatal Collisions



Almost half (**47%**) of the drivers aged between **16 and 24 years** had a BAC of **201-251+**.



Over half (**52%**) of the pedestrians were on the road with a BAC in excess of **201mg**.



Overall, over half (**58%**) of the 330 alcohol-related collisions occurred between **9pm and 5am** with a particular peak between **2 and 3am**.



Almost **1/3** of the alcohol-related collisions occurred on a Sunday.

Almost **2/3** occurred on the weekend days Friday, Saturday and Sunday.



Overall, the speed limits would suggest **19%** of alcohol-related collisions occurred in an urban area and **81%** on a more rural environment.



The majority of drivers who had consumed alcohol were **male**. Almost half (**43%**) of the drivers who had consumed alcohol were aged between **16 and 24 years**.

## Summary



### HALF OF THE DRIVERS

(both male and female) were **aged between 16 to 24 years**.



### OVER HALF

(55.8%) of the collisions where excessive **speed was cited as a contributory factor** involved a single vehicle only.



### THE TOP FIVE COUNTIES

where most collisions had excessive speed cited as a factor were **Donegal (8.4%), Cork (8%), Wexford (8%), Cavan (7%) and Galway (7%)**.



### 43% OF THE COLLISION

where excessive speed was a factor occurred **between 9pm and 4am**.



### THE MAJORITY

(91%) of the 274 drivers were **male**.



### THE PRIMARY TRIP

purpose was **social (84%)**.



### THE MAIN ACTION

indicated for the culpable driver was **loss of control of the vehicle (70%)**.





Tyres were a known contributory factor in **8% of the 858 collisions** involving a motorised vehicle



**Over half (52%)** of the tyres on the 66 vehicles with defective tyres were excessively/dangerously worn **11%** were underinflated, some dangerously low



**21 (32%)** of the 66 vehicles lost control on a bend

The condition of tyres accounted for almost **two thirds (64%)** of the 101 vehicle factors cited as contributory to the collision.



Combination of **tyres** and behavioural factors such as **alcohol, drugs, speed, distraction, fatigue** led to the final outcome of the collision.



Defective tyres were very prevalent as a factor in **single vehicle crashes (74%)**



**47% drivers** were 17 to 24 year olds



The majority of defective tyres were on **cars (84%) (6%) motorcycle** collisions had tyre quality as a contributory factor



The majority (**62%**) of the 66 collision occurred on a regional road



Dry at the time of **41 (62%)** of the 66 collision

