

Provisional Review of Fatal Collisions

January to December 31st 2017

2nd January 2018

Údarás Um Shábháilteacht Ar Bhóithre Road Safety Authority

Review of 2017 fatal collision statistics as of 31st December 2017

Overview

This report summarises the main trends in road fatalities that have emerged up to the 31st December 2017. This report has been prepared by the Road Safety Authority following analysis of the fatality reports provided to the RSA by An Garda Síochána. Note that the information contained in this report is provisional and is subject to change until the 2017 Collision Database is formally signed off by the RSA.

As of 31st December 2017, there have been 143 fatal collisions, which have resulted in 158 fatalities on Irish roads. This represents 18% fewer collisions (-31) and 15% fewer deaths (-28) compared to provisional Garda data for the full year of 2016¹.

March was the most dangerous month for road users in 2017 with 20 fatalities recorded, but July and November were also particularly dangerous with 17 deaths recorded in each month. The monthly average to the 30th of November 2017 was 13 fatalities per month.

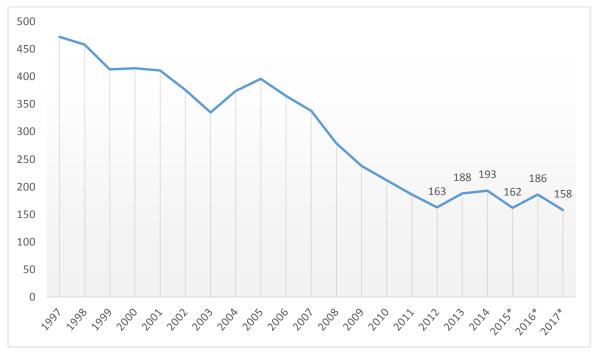


Figure 1. Fatalities by year, 1997-2017

*Note: 2015-2017 data is provisional and subject to change.

¹ Please note the analysis presented throughout this report compares the full year of 2016 (1st Jan- 31st December) to the period January 1st to December 31st 2017.

In this report, an analysis has been conducted of the following variables to help understand the current trends in fatality rates:

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Section 1. Month of year

As can be seen in figure 2, which presents the monthly fatalities from January 2014 to 31st December 2017, there can be considerable fluctuations in monthly fatalities across each year. Across the period in question, the greatest number of fatalities occurred in July 2016 (21). By contrast, both April in 2015 and 2017 (7 in each) had the lowest number of monthly fatalities over this timeframe.

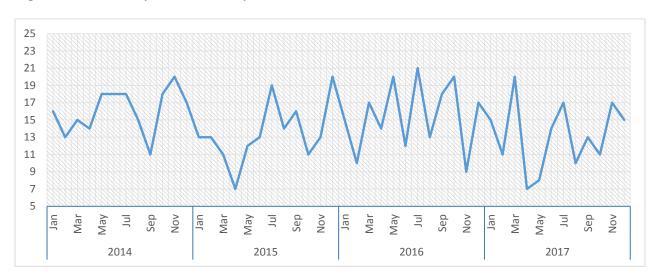
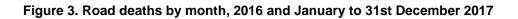
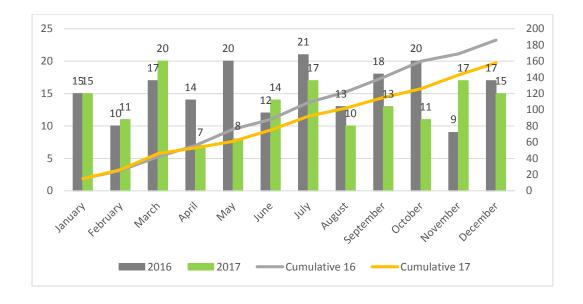


Figure 2. Fatalities by month January 2013 to December 31st 2017

In figure 3 the fatality figures for each month of the year for 2016 and 2017 are presented. March (20), July (17) and November (17) were the most dangerous months in 2017. In comparison to the same months in 2016, there has been an increase in November (+8) in 2017. However there was a large decrease in fatalities in April (-7), May (-12), October (-9) in 2017. The average number of deaths in 2017 (13 deaths per month) is lower than the annual monthly average seen in 2016 (16 deaths per month).





Section 2. Day of week

The below chart shows the distribution of fatalities by day of week for January to the 31st December 2017 compared with the full year of 2016. Monday (37) and Sunday (32) were the most dangerous days of the week in 2017. Mondays in 2017 were particularly more dangerous than Mondays in 2016 (+17 deaths). By contrast, the midweek period was safer in 2017 compared to 2016, with 44 fewer fatalities from Tuesday to Thursday in 2017 when compared to 2016. Over one-third (36%) of fatalities occurred on a Saturday and Sunday in 2017 (35% in 2016).

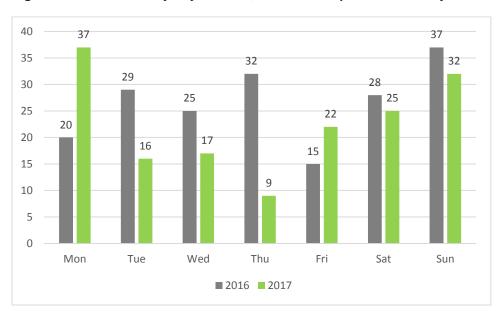


Figure 4. Road deaths by day of week, for 2016 compared to January to 31st December 2017

Section 3. Time of day

The following graph shows the distribution of road deaths by hour of day from January to December 31st 2017. A quarter of fatalities occurred between 12pm and 4pm (39); 6pm - 8pm (18) and 10am -12pm (17) were also particularly dangerous. There were 32 fatalities between midnight and 6am (20%). Of these, 91% occurred from Friday to Monday morning.

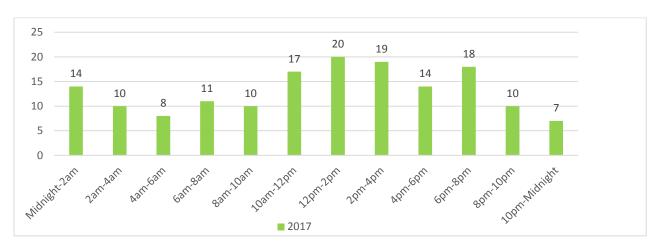


Figure 5. Road deaths by time of day, January to 31st December 2017

Figure 6 provides a further breakdown of time by the weekday vs weekend and shows a peak from 12pm to 4pm (28) followed by 4pm to 8pm (25) on weekdays.



Figure 6. Road deaths by time of day and weekday vs weekend, January to December 31st

Section 4. Where fatalities occurred

As can be seen in figure 7 below, in both 2016 and 2017 there have been more fatalities in rural areas than in urban areas. Rural areas consist of roads where the speed limit is 80km/h and greater.

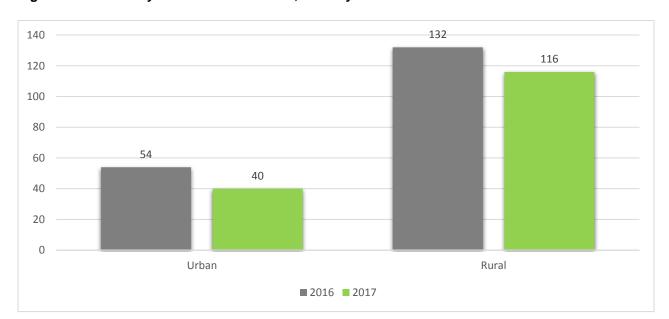


Figure 7. Fatalities by urban and rural areas, January to December 31st 2017* vs 2016

It can be seen in table 1 below that there has been a decrease in fatalities across most speed zones. This decrease is particularly evident in 50km/h (-20%), 60km/h (-75%), and 100km/h zones (-15%) between 2016 and 2017.

Table 1. Fatalities by speed limits, January to December 31th 2017 vs 2016

Speed Limit	2016	2017	% Change
<=30 km/h	2	5	
50km/h	40	32	-20%
60km/h	12	3	-75%
80km/h	59	55	-7%
100km/h	66	56	-15%
120km/h	7	5	-29%
Unknown	0	2	
	186	158	

^{*}There are two unknown speed limits in 2017 at time of print.

The highest number of fatalities in 2017 was in Dublin (23), Cork (14) and Mayo (12) (see table 2). Dublin (16) had highest number of vulnerable road users (VRU) fatalities followed by Cork (6).

Dublin, Cork, Louth, Mayo and Meath had highest number of driver fatalities (5 in each). Mayo (5) and Wexford (4) had highest number of passenger fatalities.

Table 2: County breakdown of the number of fatalities as of 31st December 2017 in comparison to the number of fatalities on the 31st December 2016

		1	1
County	2016	2017	Inc/Dec
Carlow	0	4	+4
Cavan	3	3	0
Clare	4	4	0
Cork	21	14	-7
Donegal	10	6	-4
Dublin	21	23	+2
Galway	10	6	-4
Kerry	7	8	+1
Kildare	7	5	-2
Kilkenny	6	4	-2
Laois	3	1	-2
Leitrim	1	1	0
Limerick	17	7	-10
Longford	3	2	-1
Louth	7	10	+3
Mayo	4	12	+8
Meath	12	9	-3
Monaghan	5	8	+3
Offaly	4	2	-2
Roscommon	7	4	-3
Sligo	2	3	+1
Tipperary	13	8	-5
Waterford	9	4	-5
Westmeath	4	1	-3
Wexford	4	7	+3
Wicklow	2	2	0
Total	186	158	-28

Section 5. Age profile

The highest risk age groups in 2017 are those aged 66 and older (21% of all road users killed), 16-25 (21%) and those aged 26-35 (18%).

In 2017, there have been reductions in deaths among those aged 26-35 years (-10) and 66 years and above (-11). There has also been a reduction in the number of child fatalities i.e. those aged 0-15 years (-6) in 2017. However, there has been an increase in fatalities among those aged 46-55 years (+4) and 56-65 years (+3).

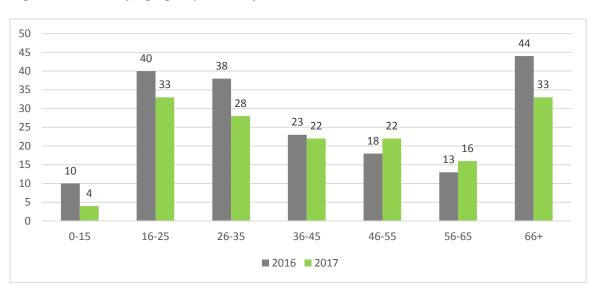


Figure 8. Deaths by age group, January to December 31st 2017 vs 2016

Section 6. Road user type

As can be seen in the graph and table below, driver and passenger fatalities represent almost three fifths of fatalities (59%) in 2017, while VRU's represent two fifths (41%).

There has been a decrease in driver fatalities (-17%) and passenger fatalities (-32%). Overall, this represents a net decrease in vehicle occupant fatalities from 119 in 2016 to 93 in 2017 (-22%). There has also been a reduction in pedestrian (-5) and motorcyclist fatalities (-2). However there has been an increase among pedal cyclists (+5) fatalities.



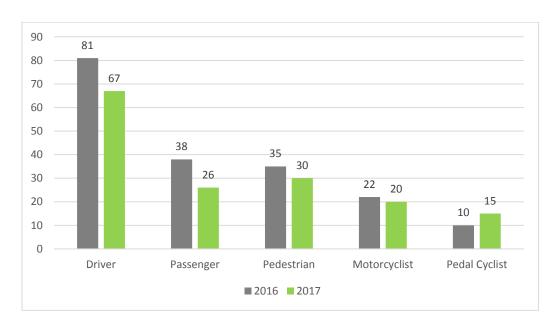


Table 3. Road User Fatalities as of 31st December 2017

	2016	2017	% Change
Driver	81	67	-17%
Passenger	38	26	-32%
Pedestrian	35	30	-14%
Motorcyclist*	22	20	-9%
Pedal Cyclist	10	15	+50%
Total	186	158	

^{*}Note: the motorcyclist figure is inclusive of pillion passengers.

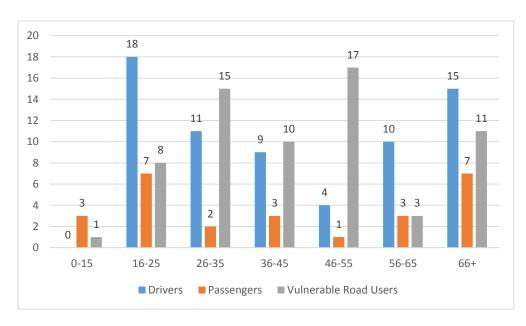
Section 7. Age profile by road user type

When looking at age profile by road user, it can be seen that of the drivers killed the highest risk age group was those aged 16-25 years (18) followed by those aged 66+ years (15).

In relation to VRU fatalities the groups which were most at risk were those aged 46-55 (17) and those aged 26-35 (15).

Passenger fatalities were highest among the 16-25 age group (7) and those aged 66+ years (7).

Figure 10. Deaths by age group of drivers, passengers and vulnerable road users, January to 31st December 2017



Section 8. Profile of fatalities by road user group

Profile of Driver Fatalities:

As of 31st December, there were 67 driver fatalities in 2017.

Gender: The majority of driver fatalities were male (53 of the 67 drivers).

Age: In 2017 the majority of fatalities among drivers were those aged 16-25 (18) and those aged 66 years and above (15).

Speed limit: The majority of fatalities occurred on higher speed roads (59), mainly on 80km/h roads (29) and 100km/h roads (26). Eight fatalities occurred on roads with a speed limit of 60km/h or less.

Time of day: Seventeen driver fatalities took place between midnight and 8am, 14 fatalities occurred between 8am and 12pm and 19 fatalities occurred between the hours of 12pm and 4pm. Eleven driver fatalities occured between 4pm and 8pm and six driver fatalities occurred between 8pm and midnight.

Month of year: There were ten driver fatalities in March, there were nine in November and eight in February.

Seatbelt use: Where known, 15 drivers killed were reported as not wearing a seatbelt (22%); 25 drivers (37%) were confirmed as wearing a seatbelt.

Single vehicle collisions: Of the driver fatalities, 30 occurred in single vehicle collisions with the remainder involving at least one other vehicle or road user.

County: The highest number of driver fatalities occurred in Dublin, Cork, Louth, Mayo and Meath (5 in each).

Profile of Passenger Fatalities:

As of 31st December there were 26 passenger fatalities in 2017.

Gender: There were 14 male passengers killed and 12 female passengers.

Age: Older and younger people were most vulnerable; there were 7 people killed who were 16-25 years and younger and 7 people killed aged 66 and over.

Speed limits: More fatalities occurred on higher speed roads (21), nine happened on 80km/h roads and 12 on 100km/h roads. Five passenger fatalities occurred on roads with a speed limit of 60km/h or less.

Month of year: September had the highest number of passenger fatalities (5), followed by December (4); January, June and November had 3 fatalities each.

Seating position: Where known, there were 13 front seat passengers killed and 12 rear seat passengers killed (one passenger's seating position was unknown at time of print).

Seatbelts: Where known, 3 passengers were not wearing seatbelts (12%) and 11 were (42%).

Single vehicle collisions: Six of the fatalities occurred in single vehicle collisions (23%).

County: Mayo (5) and Wexford (4) had highest number of passenger fatalities.

Profile of Pedestrian Fatalities:

As of the 31st of December there were 30 pedestrian fatalities in 2017.

Gender: Twenty-three of the pedestrian fatalities were male and seven were female.

Age: The age groups with the highest risk were those aged 66 and older (7) and those aged 26-35 (7).

Speed limit: In fourteen cases, the fatality occurred on a road with a speed limit of 60km/h or less (mostly 50km/h: 12). In four cases the pedestrian was killed in a 80km/h speed limit and in ten cases it was 100km/h. Two speed limits were unknown at the time of print.

Light conditions: More pedestrian fatalities occurred in hours of darkness (21) compared to during daylight (9). Seventeen pedestrian deaths occurred between the hours of 8pm and 8am.

County: Eight pedestrian fatalities occurred in Dublin.

Profile of Motorcycle Fatalities:

As of December 31st, there were 20 motorcycle fatalities in 2017 (inclusive of one pillion passenger).

Gender: 19 of the motorcyclists killed were male (95%).

Age: Six motorcyclists were aged 26-35 and six were aged 50 years and over.

Speed limits: In eight cases, the collision occurred in a 50km/h zone, in eight cases in a 80km/h zone and in four, the collision occurred in a 100 km/h zone.

Vehicles & other drivers involved: Of the 20 collisions, eight were single vehicle collisions (40%).

Month: There were six motorcyclist fatalities in July and three motorcyclist fatalities in August.

Time of day: Fifteen of the collisions took place between the hours of 9am-9pm (75%).

County: there were four motorcyclist fatalities in Dublin.

Profile of Cyclist Fatalities:

As of December 31st, there were 15 cyclist fatalities in 2017.

Gender: 10 cyclist fatalities were male.

Age: All cyclists killed were aged 25 or older. Five were 25-39 years of age, seven were between 45 and 64 years of age and three were aged 65 year and older.

Speed limits: Five collisions occurred on roads with a 50km/h speed limit and ten occurred on a road with a 80km/h speed limit or more.

Light conditions: Thirteen collisions occurred during daylight conditions and two collisions occurred during hours of darkness.

County: Four cyclist fatalities occurred in Dublin and three occurred in each of Kerry and Cork.

Day of week: Seven of the fatalities occurred on a Sunday, three on a Tuesday, two each on Wednesday and Friday and one cyclist fatality occurred on a Monday,

Section 9. Summary

The key findings of this provisional review of 2017 fatalities from January to 31st of December can be summarised as follows:

In 2017 there have been 158 fatalities in 143 fatal collisions.

- There has been a decrease in fatalities across drivers (-14), passengers (-12), pedestrians (-5) and motorcyclists (-2) compared to the full year of 2016.
- However, there has been an increase in pedal cyclist fatalities (+5) in 2017 compared to 2016.
- The highest risk age groups in 2017 are those aged 66 and older (21% of all road users killed), 16-25 year olds (21%) and those aged 26-35 (18%). This is a similar trend to that of 2016.
- There has also been fewer child fatalities in 2017 (4) compared to 2016 (10).
- March was a particularly dangerous month with 20 deaths, followed by July and November (17 in each).
- The highest number of fatalities occurred from 12pm-4pm (39).
- Monday (37) had the highest number of fatalities, followed by Sunday (32).
- Dublin (23), Cork (14) and Mayo (12) had the highest number of fatalities overall.
- Non-wearing of seatbelts remains a concern for both drivers and passengers (19%).

The information contained in this report will be used by the RSA to inform interventions and campaigns, as the RSA is committed to the implementation of evidence based policies.