Department for Transport

Reported road casualties in Great Britain: Estimates for accidents involving illegal alcohol levels: 2015 (second provisional)

About this release

This publication presents the second estimates of casualties arising from reported accidents involving at least one motor vehicle driver or rider over the legal alcohol limit for driving, in Great Britain in 2015. We published the first 2015 estimate, a range, in August 2016. As more 2015 data are now available the range estimate, published here, becomes more accurate and we can produce a central estimate for the first time. Final 2015 estimates, based on even more complete data, will be published in August 2017.

Uncertainty

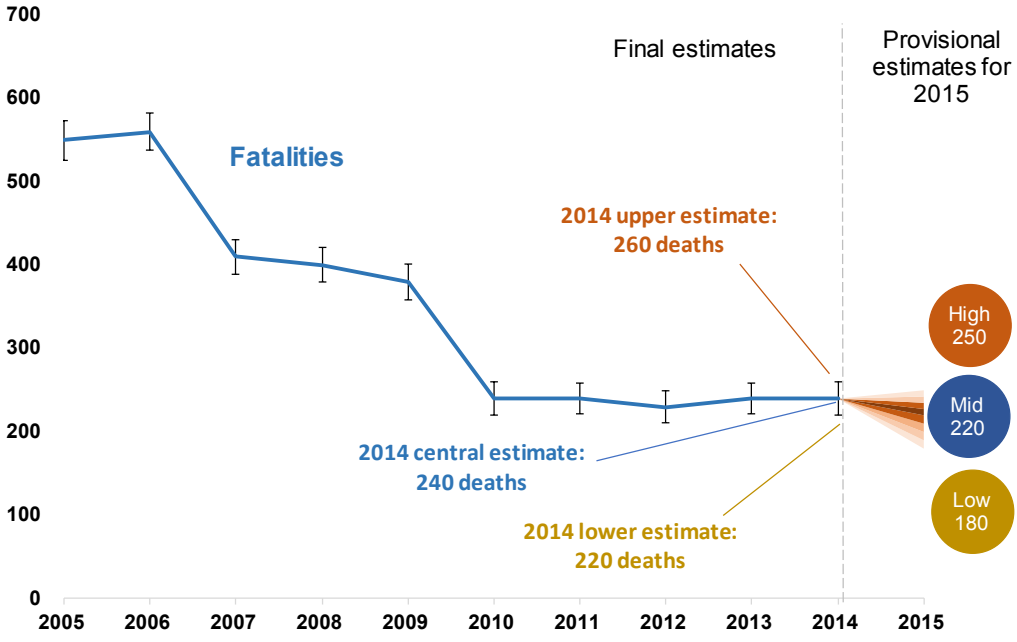
These statistics, especially the number of fatalities, are subject to considerable uncertainty (p5). This means that it is impossible to be sure of the precise number of casualties, so ranges and confidence intervals are used throughout the publication.

In this publication

Provisional estimates for 2015 show that between 180 and 250 people were killed in accidents in Great Britain where at least one driver was over the drink drive limit, with a central estimate of 220 deaths.

- Due to the uncertainty in the estimates, fatalities should be regarded as **having remained unchanged since 2010.**
- An estimate of 1,380 people were **killed or seriously injured (KSI)** when at least one driver was over the limit. This represents a **statistically significant rise** from 1,310 in 2014.
- The **total number of collisions and accidents where at least one driver was over the alcohol limit** rose by 2 per cent to 5,740 in 2015.

Chart 1: Fatalities in reported drink drive accidents: GB 2005 to 2015; error bars show 95% confidence intervals



RESPONSIBLE STATISTICIAN: Name: Elizabeth Wloch

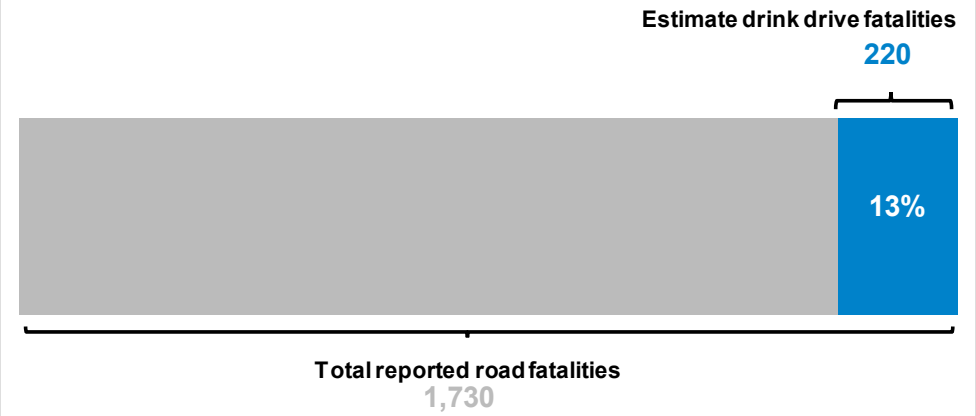
FURTHER INFORMATION: Media: 020 7944 3021 Public: 020 7944 6595 roadacc.stats@dft.gsi.gov.uk

Casualties in drink drive accidents in 2015

The provisional central estimate of the number of deaths in accidents with at least one driver over the alcohol limit for 2015 is **220**. This represents about 13 per cent of all deaths in reported road accidents in 2015. **Although the central estimate for 2015 is lower than the final figure for 2014, the difference is not statistically significant and continues a period of stability recorded since 2010.**

The fatalities figure is based on coroners' and procurators' fiscal reports for 38 per cent of the drivers or riders who were killed in road traffic accidents in 2015. When the final figure is published in summer 2017 it will be based on around 60-70 per cent of drivers who died in road accidents. Therefore the **final figure may be different from this provisional estimate**. The 95% confidence range indicates that we can be 95% certain that the **true figure, as opposed to the estimate, falls somwhere between 180 and 250 fatalities**.

Chart 2: Fatalities in reported drink drive accidents in comparison with overall fatalities: GB, 2015



Definitions

Drink drive accident: A reported incident on a public road in which someone is killed or injured, where at least one of the motor vehicle drivers or riders involved met one of these criteria:

• refused to give a breath test specimen when requested by the police (other than when incapable of doing so for medical reasons)

• failed a roadside breath test by registering above 35 micrograms of alcohol per 100ml of breath in England and Wales and above 22 micorgrams of alcohol per 100ml of breath in Scotland

• died and was subsequently found to have more than 80 milligrams of alcohol per 100ml of blood in England and Wales and more than 50 milligrams of alcohol per 100ml of blood in Scotland

Drink drive casualties: All road users killed or injured in drink drive accidents.

A full list of the casualty definitions used in this release can be found here.

How does this compare with the previous estimate?

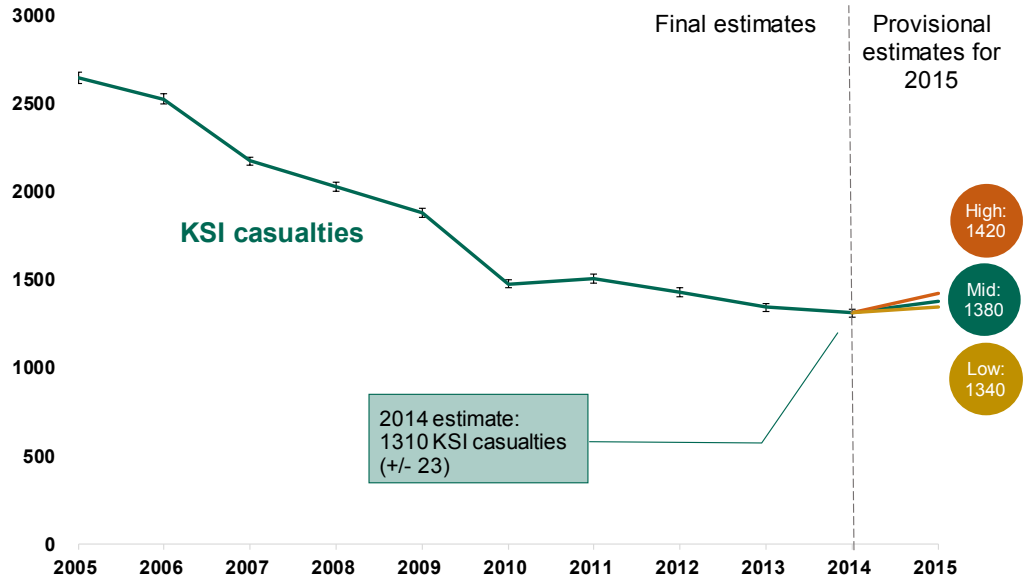
Provisional estimates for 2015 were published in August 2016 (see here). Compared with the first release, the second provisional estimates for 2015 published here are lower for all severities.

In addition, the range for fatalities has also narrowed. In the first provisional release the range was 200 to 290. The revised range is 180 to 250 fatalities.

These changes are due to us having more reports from coroners and procurators fiscal to include in the estimate. This increases the accuracy of the figures.

For the first time we can estimate a central point of 220 fatalities for 2015. As it takes around 18 months from year-end to collect the toxicology samples, provisional estimates based on a limited sample of data are published in August and February.

Chart 3: Killed or seriously injured (KSI) casualties in reported drink drive accidents: GB 2005 to 2015; error bars show 95% confidence intervals



95% confidence interval

The bars on the graph are ranges of values for an estimate which we are 95% confident that the 'true' value falls in.

Technically, it indicates that if many samples of the same population were drawn, 95% of the results would fall between the confidence interval values.

For instance, for 2015 we have an upper limit 250 and lower limit of 180. This means that we are 95% confident that the true number of fatalities for 2015 will fall between these values, but most likely towards the centre of this range.

The initial estimate of the number of **killed or seriously injured casualties** (KSI casualties) was 1,420. This figure has now been **revised downwards to a central estimate of 1,380**. Although there is still considerable uncertainty in this figure, if it holds to be correct when the final estimates are released in August 2017 it will be the first rise in drink drive KSI casualties since 2010. **The indicated increase from 1,310 in 2014 is statistically significant**.

There has been an **rise in overall drink drive casualties of all severities** from 2014. The final 2014 total was 8,210 - the revised 2015 figure is 8,480, a 3 per cent increase. This total is slightly lower than was reported for the initial estimates so it is possible that it could reduce again once the final figures are available.

2010 - 2014 average

2015 Drink drive casualties comapred with 2010-2014 average:

Killed	↓	8% (ns)
Serious	↓	1% (ns)
KSI	↓	2% (ns)
All casualties	↓	9% *
Accidents	↓	8% *

(ns) = not significant

* = significant at 95% level

Reported drink drive accident totals

There were an estimated 180 **fatal drink drive accidents** in 2015. Although this seems to be a reduction from 2014 levels the change is not statistical significant and it should be interpreted as **having remained unchanged since 2010**.

In contrast, the **total number of drink drive accidents** of all severities rose by 2 per cent to 5,740 in 2015. This means that around 4 per cent of all reported road traffic accidents in 2015 involved at least one driver over the alcohol limit.

Table RAS51001: Casualties in reported drink drive accidents: GB 1979 to 2015

Number

	Accidents[1]				Casualties[1]					
Year	Fatal	Serious	Slight	Total	95% CI lower[2]	Killed	95% CI upper[2]	Serious	Slight	Total
1979	1,380	5,630	12,460	19,470	:	1,640	:	8,300	21,490	31,430
1980	1,280	5,430	11,860	18,570	:	1,450	:	7,970	20,420	29,830
1981	1,200	4,940	10,900	17,040	:	1,420	:	7,370	19,160	27,950
1982	1,300	5,420	12,070	18,800	:	1,550	:	8,010	20,660	30,220
1983	950	4,750	11,430	17,130	:	1,110	:	6,800	18,610	26,520
1984	1,000	4,790	11,540	17,320	:	1,170	:	6,820	19,410	27,390
1985	900	4,900	11,460	17,260	:	1,040	:	6,810	19,380	27,220
1986	850	4,590	11,510	16,940	:	990	:	6,440	19,220	26,650
1987	780	4,220	10,560	15,560	:	900	:	5,900	17,670	24,470
1988	680	3,660	10,190	14,520	:	790	:	5,100	16,860	22,740
1989	700	3,390	10,300	14,390	:	810	:	4,790	16,620	22,220
1990	650	2,910	9,650	13,210	:	760	:	4,090	15,550	20,400
1991	570	2,590	8,530	11,690	:	660	:	3,610	13,610	17,880
1992	540	2,360	7,890	10,790	:	660	:	3,280	12,770	16,710
1993	460	1,870	7,160	9,480	:	540	:	2,660	11,780	14,980
1994	470	2,090	7,330	9,900	:	540	:	2,840	11,780	15,160
1995	460	2,140	7,590	10,180	:	540	:	3,000	12,450	16,000
1996	480	2,150	8,240	10,870	:	580	:	3,010	13,450	17,040
1997	470	2,140	8,100	10,710	:	550	:	2,940	13,310	16,800
1998	410	1,860	7,840	10,100	:	460	:	2,520	12,610	15,580
1999	400	1,850	8,800	11,050	:	460	:	2,470	13,980	16,910
2000	450	1,950	9,410	11,800	500	530	560	2,540	14,990	18,060
2001	470	2,020	9,780	12,270	510	530	560	2,700	15,550	18,780
2002	480	2,050	10,620	13,150	520	550	580	2,790	16,760	20,100
2003	500	1,970	9,930	12,400	550	580	600	2,590	15,820	18,990
2004	520	1,790	8,900	11,210	560	580	610	2,340	14,060	16,980
2005	470	1,550	8,060	10,080	530	550	580	2,090	12,760	15,400
2006	490	1,480	7,430	9,400	530	560	580	1,970	11,850	14,370
2007	370	1,400	7,520	9,290	390	410	430	1,760	11,850	14,020
2008	350	1,280	6,980	8,620	380	400	420	1,620	10,970	12,990
2009	340	1,180	6,530	8,050	360	380	400	1,500	10,150	12,030
2010	220	990	5,420	6,620	220	240	260	1,240	8,210	9,690
2011	220	1,040	5,430	6,690	220	240	250	1,270	8,420	9,930
2012	210	960	5,460	6,630	210	230	250	1,200	8,510	9,930
2013	230	880	4,590	5,690	220	240	260	1,100	6,930	8,270
2014	220	880	4,530	5,620	220	240	260	1,070	6,900	8,210
2015 (P)	180	980	4,570	5,740	180	220	250	1,170	7,100	8,480

1. Estimates are rounded to the nearest ten.
2. Upper and lower range for fatalities based on the 95% confidence interval.

(P) Provisional

Strengths and weaknesses of the data

Sampling uncertainty

Toxicology data are not available for all killed drivers / riders recorded in Stats19 and are typically available for around 60 to 70 per cent of relevant cases (62 per cent for each year between 2012 and 2014). To account for the killed drivers without a known BAC, the casualties from the known cases are scaled up. The estimates are therefore based on a sample, rather than a complete count, which introduces an element of uncertainty.

Due to the nature of the data used to create these estimates, **there is considerably more uncertainty in the number of fatalities and fatal accidents than any other severity level**. The reason for this is that **56 per cent of the fatalities in 2015 were motor vehicle drivers themselves**. To know whether the deceased drivers were over the alcohol limit we are more reliant on information from coroners and procurators fiscal.

For more information see uncertainty section in the previous provisional publication available here.

Under-reporting of road casualties

The estimates in this release are based only on those road accidents which are reported to the police. Comparisons of road accident reports with death registrations show that very few, if any, road accident fatalities are not reported to the police. However, it has long been known that a considerable proportion of non-fatal casualties are not known to the police. The data used as the basis for these statistics are therefore not a complete record of all personal injury road accidents, and this should be borne in mind when using and analysing the figures.

Background information

National Statistics are produced to high professional standards as set out in the Code of Practice for Official Statistics. They undergo quality assurance reviews to ensure that they meet customer needs. The statistics were last assessed during 2013 and the report, number 258, is available at: www.statisticsauthority.gov.uk/assessment/assessment/assessment-reports/index.html.

Details of Ministers and officials who receive pre-release access to these statistics up to 24 hours before release can be found here: www.gov.uk/government/publications/road-accident-and-safety-statistics-pre-release-access-list.

Methodology details

A methodology note describing how the estimates are compiled from the sources is available here. Stats19 forms are completed by the police to record detailed data on the circumstances, casualties and vehicles for reported personal injury accidents.

Self-reported drink and drug driving

Data from the Crime Survey for England and Wales is available here.

Breath test statistics

Breath test figures for reported road accidents in 2015 can be found here and statistics for roadside screening breath tests can be found here.

Further information

Ministry of Justice data on driving convictions can be found here.

Next release

Updated 2015 final estimates for casualties in reported drink drive accidents will be published in August 2017.