



Reported road casualties in Great Britain: Estimates for accidents involving illegal alcohol levels: 2014 (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 2014. We published the first 2014 estimate, a range, in August 2015. As more 2014 data are now available the range estimate, published here, becomes more accurate and we can for the first time produce a central estimate. Final 2014 estimates, based upon even more complete data, will be published in August 2016.

Uncertainty

These statistics, especially the number of fatalities, are subject to considerable uncertainty

(p6). 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.



Provisional estimates for 2014 show that between 210 and 270 people were killed in accidents in Great Britain where at least one driver was over the drink drive limit, with a central estimate of 240 deaths. This is unchanged from 2013.

However, the decrease in non-fatal casualties in comparsion with 2013 is statistically significant. If the final estimates confirm these figures, they will be the lowest on record.

- Due to the uncertainty in the estimates, fatalities should be regarded as having remained unchanged since 2010.
- The total number of drink drive accidents of all severities fell by 1 per cent to 5,620 in 2014. If final estimates confirm this figure, it will be the lowest number of drink drive accidents.

Chart 1: Killed casualties in reported drink drive accidents: GB 2004 to 2014; error bars show 95% confidence intervals



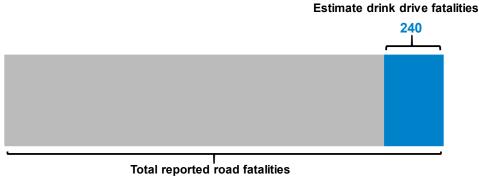
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Public: 020 7944 6595

Casualties in drink drive accidents in 2014

The provisional central estimate of the number of deaths in accidents with at least one driver over the alcohol limit for 2014 is 240. This represents about 14 per cent of all deaths in reported road accidents in 2014. The figure is unchanged compared with the final figure for 2013, following a period of stability since 2010.

Chart 2: Fatalities in reported drink drive accidents in comparison with overall fatalities: GB, 2014



1,775

The fatalities figure is based on coroners' and procurators' fiscal reports for 44 per cent of the drivers or riders who were killed in road traffic accidents in 2014. When the final figure is published in summer 2016 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 the **true figure, as opposed to the estimate, is likely to between 210 and 270 fatalities**.

The number of road fatalities have decreased over the long term As the number of deaths fall, missing data create larger uncertainties in the estimates.

How does this compare with the previous estimate?

Provisional estimates for 2014 were published in August 2015 (see here). Compared with these estimates the second provisional estimates for 2014 published here show the range for fatalities narrowing. In the first provisional figures the range was 240 to 340. The revised range is from 210 to 270. This change is due to more reports becoming available from coroners and procurators fiscal. For the first time we can estimate a central point of 240 fatalities for 2014. 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.

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
- died and was subsequently found to have more than 80 milligrams of alcohol per 100ml of blood

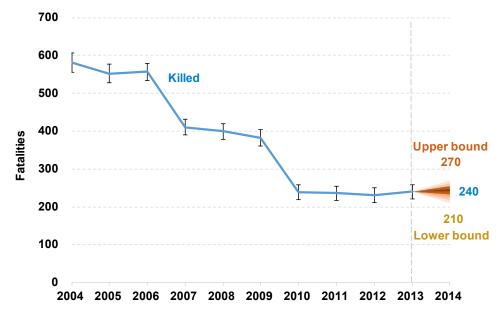
Drink drive casualties: All road users killed or injured in drink drive accidents.

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

Scottish drink drive limit

On the 5th December 2014 the limit in Scotland was reduced to 22 micrograms of alcohol per 100ml of breath or 50 milligrams of alcohol per 100ml of blood. The 2014 provisional estimates have been produced using the new limits from 5th December onwards.





Following a sharp drop in deaths between 2009 and 2010 (a fall of around 40 per cent) drink drive deaths have been stable since 2010, between 230 and 240 each year. A similar period of stability was seen earlier in the decade – between 2002 and 2006 deaths fluctuated between 550 and 580, before falling further in 2007.

Similarly, the number of killed or seriously injured (KSI) casualties, which is 1,320 for 2014, will also be the lowest on record if confirmed in the final estimates. The reduction in KSI casualties from the 2013 levels are not statistically significant.

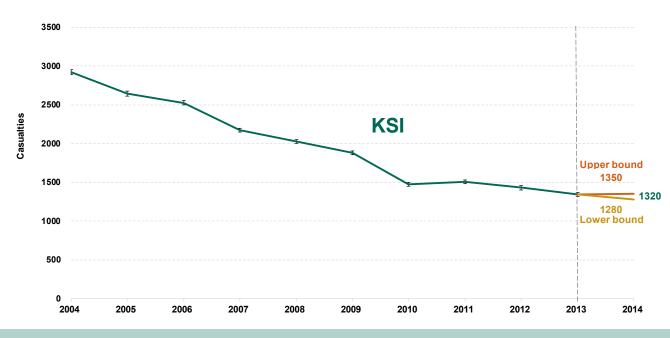


Chart 4: Killed or seriously injured (KSI) casualties in reported drink drive accidents: GB 2004 to 2014; error bars show 95% confidence intervals

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 2014 we have an upper bound 270 and lower bound of 210. This means that we are 95% confident that the true number of fatalities for 2014 will fall between 210 and 270 deaths, but most likely towards the centre of this range.

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The number of **seriously injured casualties** in drink drive accidents decreased by 2 per cent from 1,100 in 2013 to 1,080 in 2014. If this figure is confirmed in the final estimates published late this year, then this will be the **lowest number of seriously injured casualties on record**. The **reduction in seriously injured casualties is statistically significant**.

The **total number of casualties** of all types in drink drive accidents for 2014 is 8,220, down 1 per cent on the 2013 figure. This will be the lowest total on record if confirmed in the final estimates later this year.

There were an estimated 210 **fatal drink drive accidents** in 2014, down 6 per cent on the 2013 figure (230). Although this seems to be a reduction from 2013 levels the change is not statistical significant and it should be interpreted as **having remained unchanged since 2010**. The estimates for fatal accidents have fallen while fatal casualties have remained unchanged; this reflects the uncertainty in the estimates for fatalities.

Similarly, the **total number of drink drive accidents** of all severities fell by 1 per cent to 5,620 in 2014. This means that around 4 per cent of all reported road traffic accidents in 2014 involved at least one driver over the drink limit. This is also the **lowest number of drink drive accidents on record**.

Comparing with baselines

2010-2014 average is the new baseline, following the publication of the <u>Working Together to Build</u> <u>a Safer Road System: British Road Safety Statement</u> in December 2015. However, as the 2014 figures are provisional these are subject to change.

2014 Drink drive casualties compared with the 2010-2014 average:

Killed	1 %
Serious	U 9%
KSI	U 7%
All casualties	U 11%
Accidents	U 10%

2005-2009 average was the baseline for the <u>Strategic Framework for Road Safety Outcomes</u>. We have included them here to help with the migration to the new baseline.

2014 Drink drive casualties compared with the 2005-2009 average:

Killed	U 48%
Serious	U 40%
KSI	U 41%
All casualties	U 40%
Accidents	U 38%

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Table RAS51001: Casualties in reported drink drive accidents: GB 1979 to 2014

										Number
	Accidents ¹					Casualties ¹				
Year	Fatal	Serious	Slight	Total	95% Cl lower ²	Killed	95% Cl 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 (P)	210	880	4,530	5,620	210	240	270	1,080	6,910	8,220

1. Estimates are rounded to the nearest ten.

2. Upper and lower range for fatalities based on the 95% confidence interval.

(P) Provisional

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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 – 70 per cent of relevant cases (62 per cent for 2013). To account for the killed drivers without a known BAC, the casualties from the known cases are scaled up. Thus, the estimates are 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, of the **1,775 deaths in 2014, 951 of the fatalities were vehicle drivers themselves**. In the accidents where there was a fatality that was not a driver, we are confident that all of the drivers would have been breathtested at the scene or at a later point (for instance, in hospital). Therefore, in the majority of these specific cases the police record of the accident contains all the information required to decide if any driver in the accident were over the drink drive limit.

However, of the 1,631 fatal accidents involving at least one motor vehicle, 935 (57 per cent of the total) resulted in the death of one or more drivers or riders of motor vehicles. Information about the blood alcohol content (BAC) level for the drivers who died is required from coroners and procurators fiscal to know whether anyone involved in these accidents was over the drink drive limit.

For more information see uncertainty section in the previous provisional publication available <u>here</u>.

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.

Methodology details

A methodology note describing how the estimates are compiled from the sources is available <u>here</u>. 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 <u>here</u>.

Further information

Ministry of Justice data on driving convictions can be found <u>here</u>.

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 first assessment report (report number 4) and letter confirming that the statistics have been designated as National Statistics are available at: www.statisticsauthority.gov.uk/assessment/assessment/assessmentreports/index.html. The statistics were reassessed during 2013 and the report, number 258, was published at the link above on the 25th July 2013.

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

Next release

Updated 2014 final estimates for casualties in reported drink drive accidents will be published in August 2016.