



Department for Transport

# Reported road casualties in Great Britain: Estimates for accidents involving illegal alcohol levels: 2013 (final) and 2014 (provisional)

**Final estimates for 2013 show that between 220 and 260 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.**

Due to the uncertainty in the estimates, fatalities should be regarded as having remained unchanged since 2010. The change from 230 deaths in 2012 is not statistically significant.

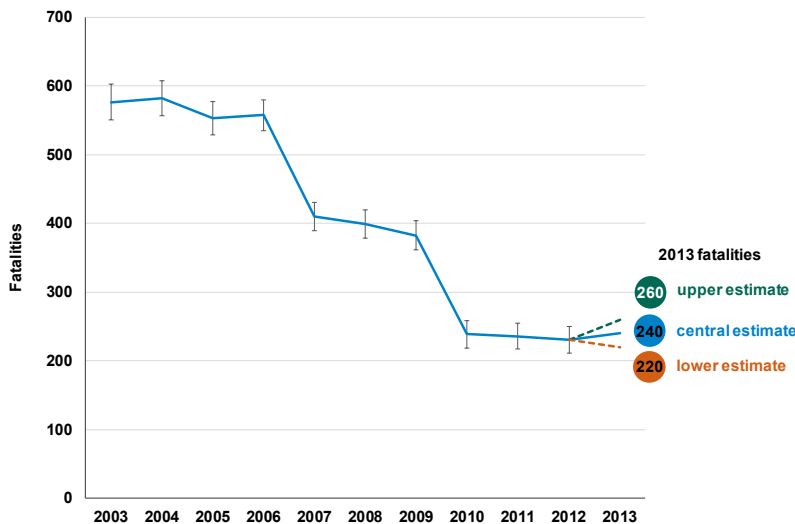
## About this release

This publication presents 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 2013 and 2014. Figures are derived from the Stats19 forms completed by the police plus toxicology data for road fatalities from coroners and procurators fiscal.

## Uncertainty

These statistics, especially the number of fatalities, are subject to considerable uncertainty (p13). 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.

## Fatalities in reported drink drive accidents: GB, 2003-2013



- Around 14 per cent of all **deaths** in reported road traffic accidents in 2013 involved at least one driver over the drink drive limit.
- The number of **seriously injured casualties** in drink drive accidents decreased by 8 per cent from 1,200 in 2012 to 1,100 in 2013.
- The total number of **casualties of all severities** in drink drive accidents for 2013 was 8,270, down 17 per cent on the 2012 figure and the lowest total on record.
- The **first provisional estimates** for 2014 suggest there were between 240 and 340 deaths in drink drive accidents.

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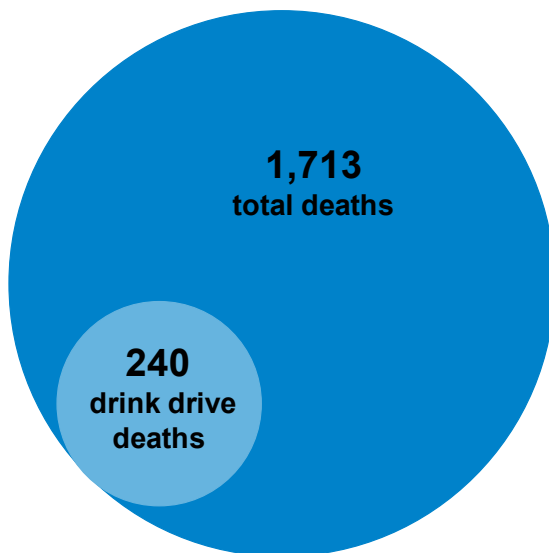
RESPONSIBLE STATISTICIAN: Name: David Mais

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# Casualties in drink drive accidents in 2013

The final estimate of the number of deaths in drink drive accidents for 2013 is 240. This represents about 14 per cent of all deaths in reported road accidents in 2013. The figure is slightly higher than in 2012, but, for the reasons outlined below, **this change is not statistically significant**.

**Chart 1: Fatalities in reported drink drive accidents in comparison with overall fatalities: GB, 2013**



The fatalities figure is based on coroners' and procurators' fiscal reports for 62 per cent of the drivers or riders who were killed in road traffic accidents in 2013. At a 95% confidence interval, **the final figure could be between 220 and 260 fatalities**.

The 95% confidence intervals for the 2012 and 2013 fatality figures overlap (see chart 2). This means that **although there is a small change in the central estimate of fatalities, this change is not statistically significant**, and is more likely to reflect differences from the coroners' and procurators' fiscal reports on fatalities that have not been returned, or differences in the drivers who died later than 12 hours after the accident, rather than a genuine increase in the number of people who died in drink drive accidents. **As the number of deaths fall, missing data create larger uncertainties in the estimates.**

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. These are the **lowest figures seen since detailed reporting began** in 1979. A similar period of stability was seen earlier in the decade – between 2002 and 2006, deaths fluctuated between 550 and 580 before falling off in 2007.

## 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

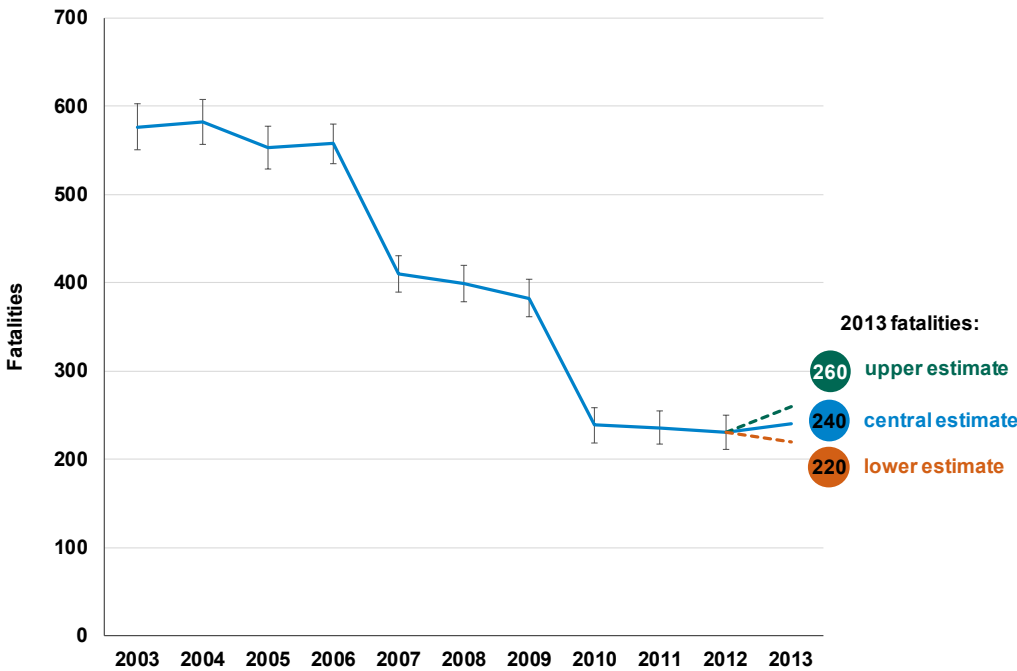
**Drink drive casualties:** All road users killed or injured in drink drive accidents.

A full list of the casualty definitions used in this release can be found [here](#).

## 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.

**Chart 2: Killed casualties in reported drink drive accidents: GB 2003 to 2013; error bars show 95% confidence intervals**

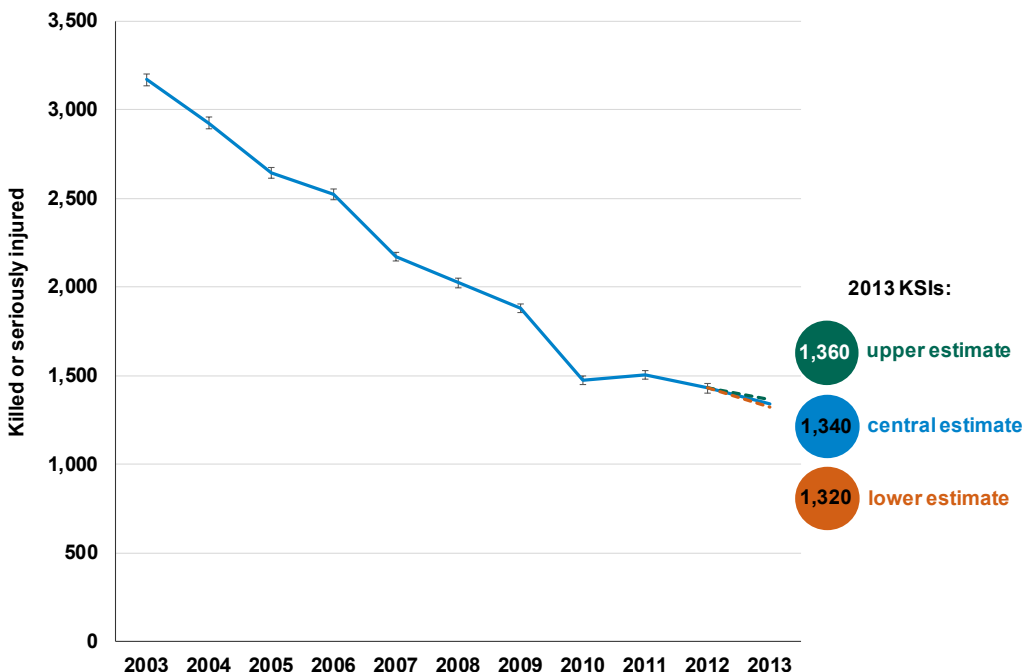


**95% confidence interval**

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

The number of **seriously injured casualties** in drink drive accidents decreased by 8 per cent from 1,200 in 2012 to 1,100 in 2013. This figure is the **lowest number of seriously injured casualties on record**. Similarly, the number of killed or seriously injured (KSI) casualties, which is 1,340 for 2013, is also the lowest on record as shown in chart 3. The **reduction in seriously injured and KSI casualties from the 2012 levels are statistically significant**.

**Chart 3: Killed or seriously injured (KSI) casualties in reported drink drive accidents: GB 2003 to 2013; error bars show 95% confidence intervals**



**2005-2009 average**

2005 -2009 average is the baseline for the [Strategic Framework for Road Safety Outcomes](#).

**2013 Drink drive casualties compared to the 2005-2009 average:**

Killed	48%
Serious	38%
KSI	40%
All casualties	40%
Accidents	37%

**Table RAS51001: Casualties in reported drink drive accidents: GB 1979 to 2013**

Year	Accidents <sup>1</sup>				Casualties <sup>1</sup>						Number
	Fatal	Serious	Slight	Total	95% CI	Killed	95% CI	Serious	Slight	Total	
					lower <sup>2</sup>		upper <sup>2</sup>				
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	

1. Estimates are rounded to the nearest ten.

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

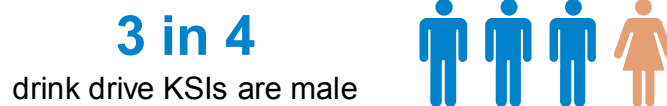
The **total number of casualties** of all types in drink drive accidents for 2013 is 8,270, down 17 per cent on the 2012 figure and the lowest total on record.

There were an estimated 230 **fatal drink drive accidents** in 2013. However, as with the fatal casualty figures above, this total is subject to considerable uncertainty and as a result should be regarded as having remained unchanged since 2010.

In contrast, the **total number of drink drive accidents** of all severities fell by 14 per cent to 5,690 in 2013. This means that around 4 per cent of all reported road traffic accidents in 2013 involved at least one driver over the drink limit. This is also the **lowest number of drink drive accidents on record**.

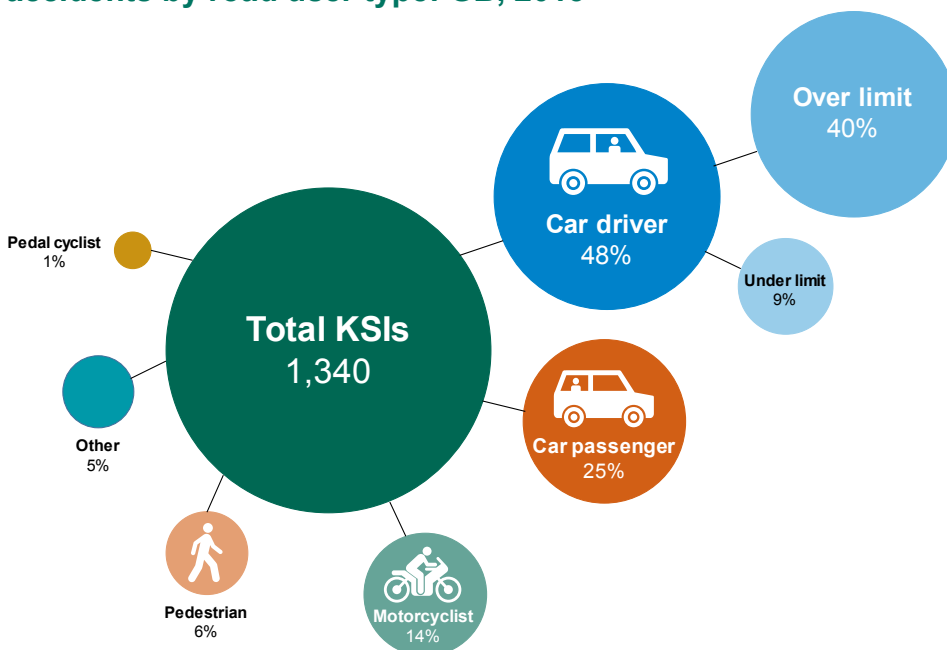
## Characteristics of reported drink drive casualties

Of the estimated 1,340 people **killed or seriously injured (KSI)** in reported drink drive accidents in 2013, an estimated 74 per cent were male. Males account for 70 per cent of KSIs in all road accidents in 2013.



The majority of people **killed or seriously injured** in reported drink drive accidents in 2013 were car drivers over the limit (40 per cent), car passengers (25 per cent), motorcyclists (14 per cent) and car drivers under the limit (9 per cent).

**Chart 4: Estimated number of killed or seriously injured casualties in reported drink drive accidents by road user type: GB, 2013<sup>1</sup>**



### Tables

- Estimated number of reported drink drive accidents and casualties, Great Britain, annual from 2001: [RAS51005](#).

1. Figures may not sum to 100% due to rounding.

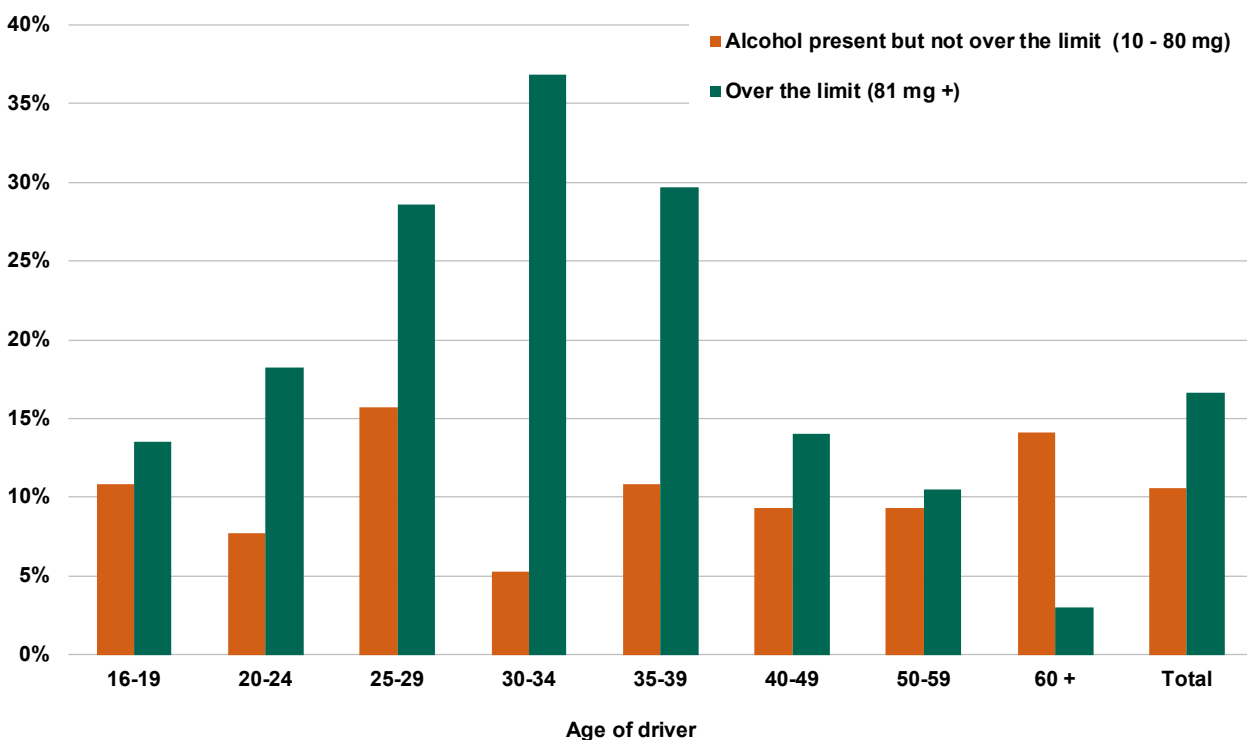
In 2013, 933 **drivers or riders** were **killed** in reported road accidents. It is estimated that 17 per cent were **over the legal blood alcohol limit**. This proportion has fallen since the early 1980s when roughly a third of drivers and riders killed were over the limit.

The proportion of killed drivers and riders over the limit is highest amongst **25 to 39 year olds**. In 2013, around 31 per cent of those killed from this age group were found to be over the limit, compared with less than 15 per cent for older age groups.

## Tables

- Drivers and riders killed: percentage over the legal blood alcohol limit, Great Britain, annual from 2001: [RAS51006](#).
- Proportion of killed drivers/riders resulting from reported accidents in each BAC, by age: [RAS51007](#).

**Chart 5: Proportion of killed drivers and riders by BAC category: GB, 2013**



## Young drink drivers

Drink drive accidents in which a **young driver** (aged 17 to 24) was **over the drink drive limit** accounted for 60 deaths and 290 seriously injured casualties during 2013, compared with 60 deaths and 320 seriously injured casualties in 2012.

In common with other drink drive accidents, the majority (84 per cent) of those killed or seriously injured were the **young drink drivers and their passengers**.

Since 2002, **killed or seriously injured** casualties from young drink drive accidents have fallen by

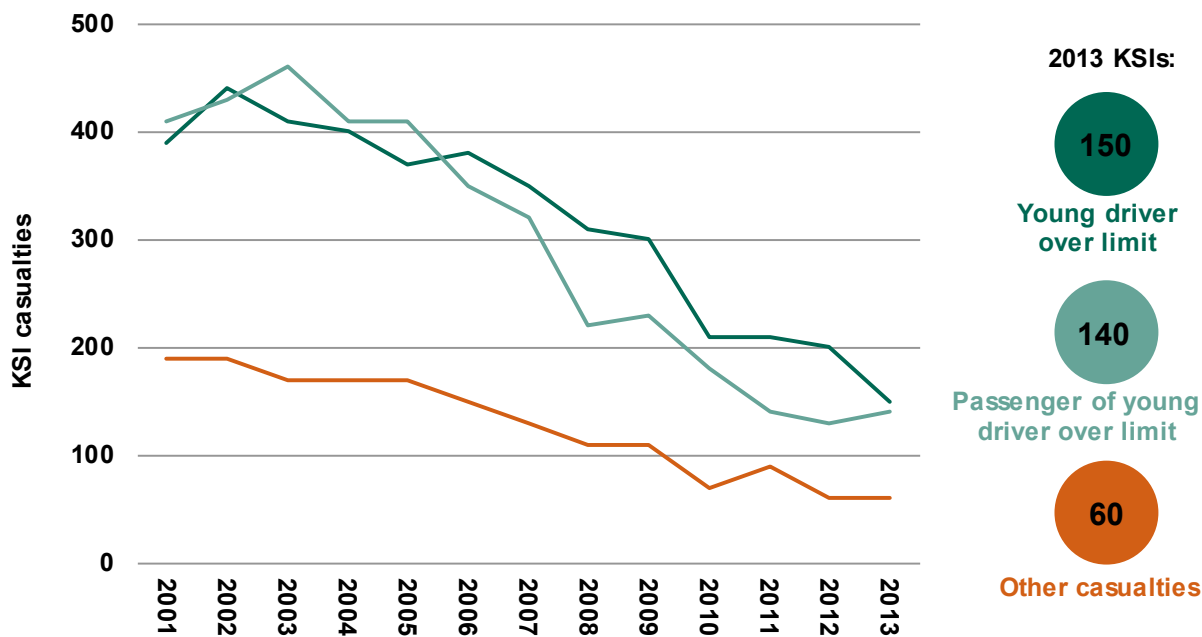
## Tables

- Killed and seriously injured casualties in reported accidents involving young drivers (17 to 24 years old) over the legal alcohol limit, Great Britain, annual from 1999: [RAS51008](#).

68 per cent.

However, **young drink drive accidents still account for a disproportionate number of drink drive casualties** – around a quarter of both drink drive fatalities and seriously injured drink drive casualties arise from accidents in which a young driver was over the drink drive limit.

**Chart 6: Killed or seriously injured casualties in reported accidents involving young drivers (17-24 years old) over the legal alcohol limit: GB, 2001-2013**



### Other casualties with alcohol involvement

Previous sections considered accidents in which the driver or rider of a motorised vehicle was over the legal alcohol limit, based either on a breath test performed at the accident scene or, if the driver or rider was killed, toxicology data from coroners / procurators fiscal. However, coroners' data is also available for **pedestrian, pedal cyclist and passenger fatalities**. Although these fatalities may not necessarily have been killed in drink drive accidents, the data nonetheless allows us to look at the extent to which alcohol may be a factor for these casualty types.

In 2013, **coroners' data** was available for 62 per cent of drivers and riders killed in reported accidents, but only 39 per cent of pedestrians and 44 per cent of cyclists. Therefore, the figures may be an overestimate for these groups, since they are more likely to be tested only if there is a suspicion of alcohol use.

[Table RAS51009](#) below shows the proportion of fatalities by blood alcohol content when they were killed, for 2013.

In 2013, 23 per cent of **car drivers** were killed when over the drink drive limit compared to 9 per cent of **motorcycle riders**.

In 2013, 67 per cent of **pedestrians** who died in road accidents “**overnight**” (between 2200 and 0359) were over the legal alcohol limit for driving. This is down from over 80 per cent in 2012, but this figure is subject to variation between years due to changes in the sample sizes. There were no **pedal cyclists** killed **overnight** who were over the legal limit for driving, although it should be noted that only 7 cyclists aged 16 or over in total were killed overnight (7 per cent of all cyclist fatalities aged 16 or over).

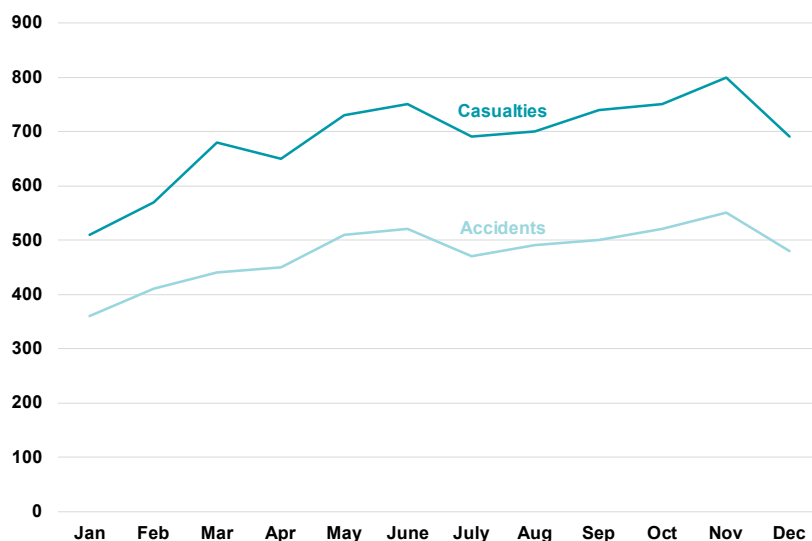
**Table RAS51009: Blood alcohol levels of reported fatalities aged 16 and over: GB 2013**

	Cumulative percentage over blood alcohol levels (mg/100ml)						Sample size	Percentage over 80mg/100ml time of accident	
	Below driving limit		Above driving limit					22:00- 03:59	04:00- 21:59
	9	50	80	100	150	200			
Motorcycle riders	17	10	9	9	6	3	206	50	7
Car drivers	34	26	23	21	17	10	329	51	16
Other vehicle drivers/riders	21	5	5	5	2	2	43	0	5
Passengers	34	27	24	23	13	9	91	61	8
Pedestrians	49	46	44	42	35	26	144	67	34
Pedal cyclists	7	7	4	2	2	0	45	0	5

## Characteristics of reported drink drive accidents

**Drinking and driving is a year-round problem.** Although the exact pattern varies year on year, the first few months of the year generally have lower numbers of drink drive accidents and casualties than other months. In 2013, the highest month for drink drive accidents and casualties was November. The fall in drink drive accidents and deaths in December may reflect Christmas drink drive campaigns and increased enforcement leading up to Christmas.

**Chart 7: Estimated number of reported drink drive accidents and casualties, by month: GB 2013**



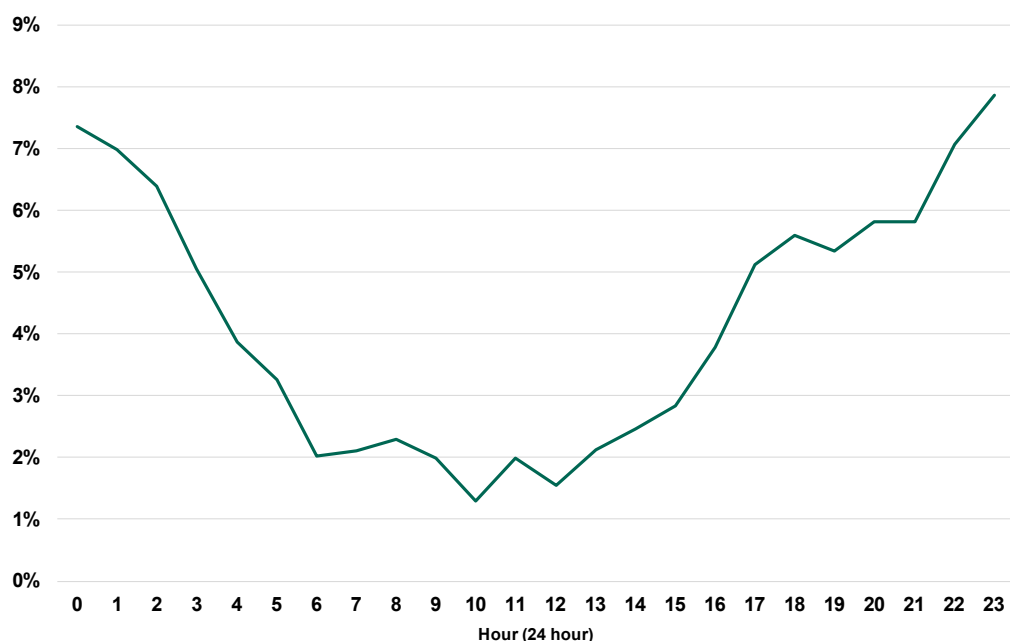
### Tables

- Estimated number of reported drink drive accidents and casualties, by month, Great Britain: [RAS51011](#).



In 2013, nearly two thirds (63 per cent) of all drink drive accidents occurred on a **Friday, Saturday or Sunday**. More than two-fifths of all drink drive accidents occurred during the hours of **9pm to 3am** (see chart 8).

**Chart 8: Reported drink drive accidents, by time of day: GB 2013**



**Tables**

- Reported drink drive accidents, by time of day, Great Britain: [RAS51012](#).

In 2013, 41 per cent of reported drink drive accidents were **single vehicle accidents, with no pedestrian casualties**. Typically these accidents involved the vehicle being driven whilst over the limit leaving the carriageway and hitting an object such as a tree or road sign. For comparison, just 15 per cent of all reported road accidents were single vehicle accidents with no pedestrian casualties.

Only 4 per cent of drink drive accidents during 2013 **involved a pedestrian casualty**, compared with 17 per cent for all accidents.

For **fatal drink drive accidents** alone, half were single vehicle accidents with no pedestrian casualties. Only 10 per cent involved pedestrian casualties.

**Table RAS51013: Reported drink drive accidents by pedestrian involvement: GB 2013**

Pedestrian casualties	Number/Percentage							
	Number of vehicles involved						Total	
	1	%	2	%	3 or more	%		%
No	2,310	92	2,410	99	720	98	5,440	96
Yes	210	8	40	1	10	2	260	4
Total	2,520	100	2,450	100	730	100	5,690	100

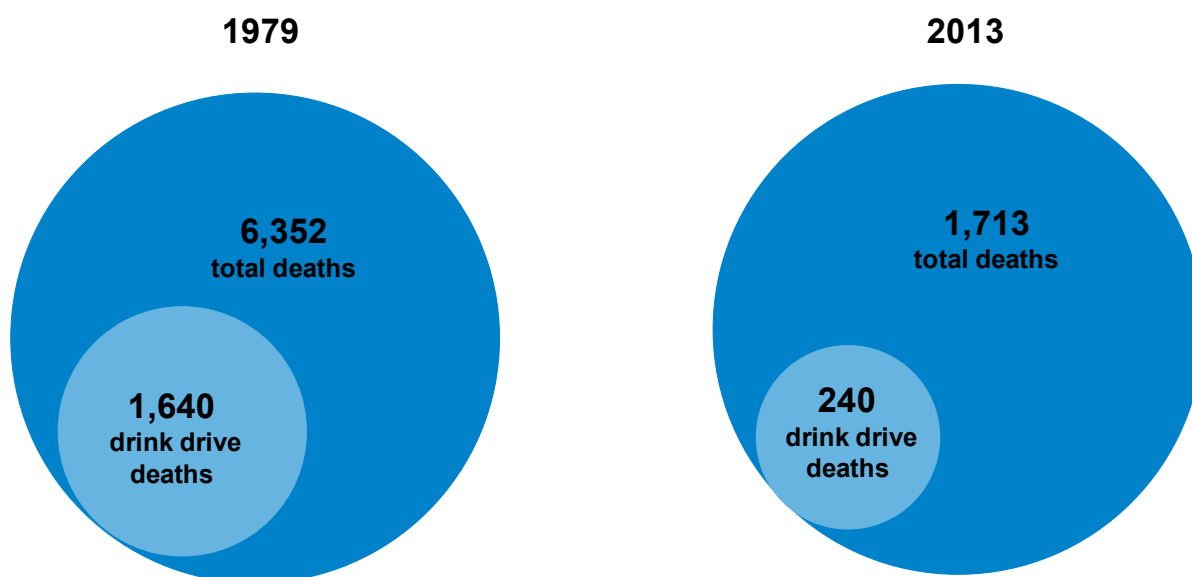
## Long term trends

Detailed reporting on drink drive accidents and casualties started in 1979. At that time, there were around 1,640 fatalities in drink drive accidents out of a total of 6,352 road deaths in all accidents.

**Drink drive fatalities in 2013 are more than six times lower than in 1979**, a significant reduction.

**Overall road deaths** have similarly fallen over this timescale – down to 1,713 in 2013, a 73 per cent decrease. However, **drink drive deaths** have had larger falls, down by 85 per cent since 1979. Rather than accounting for roughly a quarter of all road deaths, as they did in 1979, drink drive deaths now account for around 14 per cent of all road fatalities (see chart 9).

**Chart 9: Comparing total road deaths and drink drive deaths: GB, 1979 and 2013**



The **total number of drink drive casualties** has fallen by 74 per cent since 1979.

The final estimates for 2013 indicate that the number of **fatalities** in drink drive accidents have fallen by 48 per cent and number of **KSI casualties** have fallen by 40 per cent in comparison with the **2005 – 2009 average**.

## Changes from provisional estimates

As outlined in the Department's response to the consultation on drink drive statistics (available [here](#)), we will release two sets of provisional figures each year. The first set will usually be published in August of the following year (e.g. this publication for data pertaining to 2014) and will only contain an upper and lower bound for the fatalities estimate. The second set, will be

published in February two years later (e.g. February 2016 for data pertaining to 2014). The second provisional figures will contain a central estimate, plus a 95% confidence interval. The final data will be released in August two years later (e.g. August 2016 for data pertaining to 2014). Likewise, the final figures will contain a central estimate plus a 95% confidence interval.

As outlined in the February 2015 publication (see [here](#)), the first provisional estimates for 2013 indicated that the number of fatalities in drink drive accidents were somewhere between 210 and 310 deaths. The second provisional estimates indicated that there were between 230 and 290 deaths with a central estimate of 260 in 2013. The final estimate is between 220 and 260 deaths with a central estimate of 240. The central estimate fell between the 2nd provisional and final estimate due to a lower proportion of killed drivers or riders with an illegal blood alcohol level (see [uncertainty section](#) for more detail).

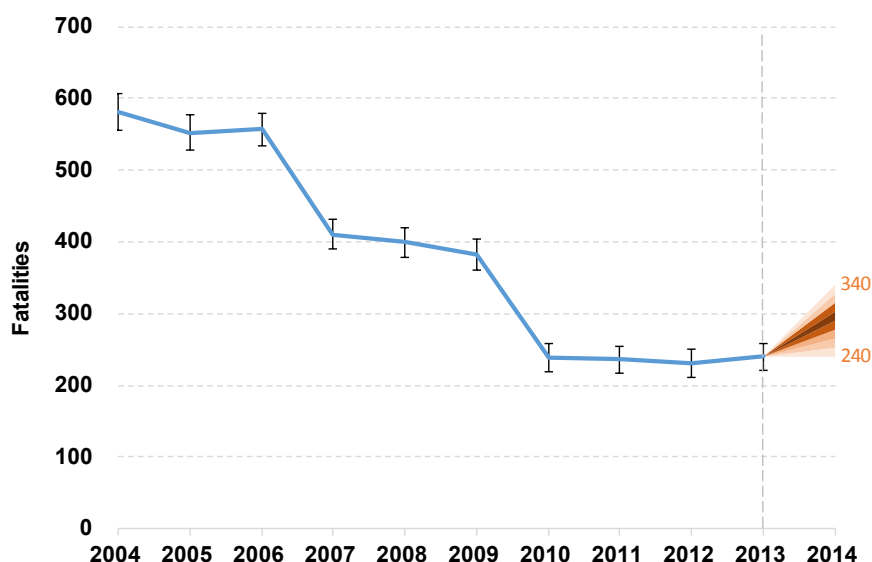
## Casualties in drink drive accidents in 2014 - provisional estimates

The first provisional estimates for 2014 suggest there were between 240 and 340 **deaths** in drink drive accidents. It is estimated that there were 1,380 **killed or seriously injured** casualties and 8,320 **casualties of all severities** in drink drive accidents in 2014.

### Next update

Updated 2014 provisional estimates for casualties in reported drink drive accidents will be published in February 2016 and will include a central fatality estimate as well as a range.

**Chart 10: First provisional estimate of drink drive deaths: GB 2004 to 2014; error bars show 95% confidence intervals and the fan shows the estimate for 2014**



### 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.

The **fatalities figure** is based on coroners' and procurators' fiscal reports for only around a fifth of the drivers or riders who were killed in road traffic accidents in 2014. Therefore the final figure, which will be based on reports on around 60-70 per cent of drivers or riders who died in road accidents, **may be substantially different from this provisional estimate** (see [uncertainty section](#) for more detail). Recent years have typically shown large falls between the provisional and final estimates.

# Breath testing

## Breath tests following reported personal injury road accidents

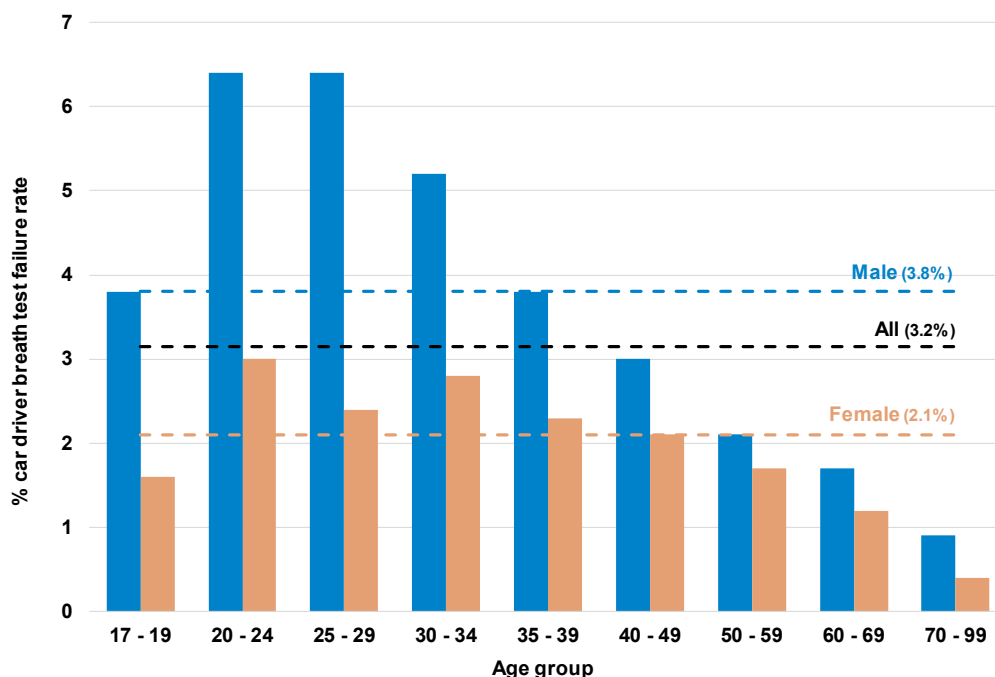
In 2014 around 246 thousand **drivers or riders** were involved in reported personal injury road accidents in Great Britain. Just over half (51 per cent) of these drivers and riders were **breath tested** by the police. Of the drivers or riders breath tested, 2.9 per cent **failed** (i.e. were over the limit or refused to provide a specimen of breath). This proportion has been broadly stable since 2010, following a decrease from 4 per cent in 2004.

As a proportion of **all drivers and riders** (including those not tested) involved in road accidents, 1.5 per cent **failed or refused a breath screening test** in 2014, relatively unchanged from 1.6 per cent in 2013.

As in previous years, failure / refusal rates amongst car drivers in 2014 were highest for **males aged 20 to 24 years and 25 to 29** - 6.4 per cent failed or refused for both groups, double the average for all drivers.

In contrast, the highest failure / refusal rate for **females** was 3 per cent, amongst **20 to 24 year olds**, below the average for all drivers.

**Chart 11: Car drivers in reported road accidents: breath tests and failures by age: GB 2014. Dashed lines denote average across all age groups for each sex**



## Tables

- Breath tests and breath test failures by drivers and riders involved in reported accidents, Great Britain, annual for latest 11 years: [RAS51002](#).
- Reported breath tests and breath test failures, all drivers and riders involved by day of week and time of day, Great Britain, latest available year: [RAS51003](#).
- Reported breath tests and breath test failures by road user type and age, Great Britain, latest available year: [RAS51004](#).
- Drivers and riders in injury road accidents: breath tests and failures, Great Britain, annual from 2001: [RAS51014](#).
- Car drivers in injury road accidents: breath tests and failures, Great Britain: [RAS51015](#).
- Reported roadside screening breath tests and breath test failures, England and Wales, annual from 2001: [RAS51016](#).

The **STATS19 breath test data** are not complete, as some drivers and riders are not breath tested since it is not always possible to administer a test to all drivers involved, e.g. when the driver or rider died or left the scene. Some drivers and riders not tested might have failed if a test could have been administered.

## Other data sources

Data on the results of **roadside breath alcohol screening tests**, administered by police forces in England and Wales, using **digital breath testing devices** can be found [here](#). The devices are able to record exact breath alcohol readings and the result of individual tests, as well as reason for test, time of day, day of week and age and gender profiles of those tested and results are downloaded to data systems on a monthly basis and provided to the Department for Transport. The data are not provided by all police forces so are incomplete and therefore do not cover England and Wales as a whole. The data relate to drivers of road vehicles only.

**Home Office data** on the number of roadside tests (and failures) administered by the police in England and Wales can be found [here](#).

## Uncertainty in the estimates

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 **1,713 deaths in 2013, 933 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 breath-tested 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 1,585 fatal accidents involving at least one motor vehicle, 925 (**58 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.

It is impossible to be absolutely sure about the BAC level of every driver involved in reported accidents without a coroners' report for each driver who died. At each stage of publication (first and second provisional, and the final data) **we do not know the BAC level for some of the drivers**.

### 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.

This is partly because it takes time to receive coroners' reports (we had 251 reports for the 2013 first provisional, 340 reports for the 2013 second provisional and 578 for the 2013 final), but also because there are some reports that are never returned, and some drivers died too long after the accident to allow the coroner to get a reliable BAC reading (we use a 12 hour cut off; any driver who died later than 12 hours after the accident is removed from the analysis). **Typically we would expect to receive, match and have usable data for 60-70 per cent of drivers.**

Unlike the other data collected and published on road accidents, therefore, the number of casualties in drink drive accidents is **based on only a sample of data**, rather than a complete set of all reported accidents. We therefore have to make assumptions about the drivers without BAC level data. These assumptions are based on the drivers for whom we do have BAC level data. However, we cannot be certain that exactly the same proportion of the unknown drivers were over the limit as the known drivers. This is where the uncertainty in the estimates comes from. **The smaller the set of known drivers we have, the greater the uncertainty** as it becomes increasingly possible that the unknown drivers have a different set of characteristics from the known drivers. For instance, the provisional data provided for 2011 indicated that 19 per cent of the drivers were over the limit, based on 329 forms from 1,040 drivers who were killed. By the time the final data were processed, though, this had fallen to 15 per cent (based on 666 forms, so just over double the sample size). This is the reason that the number of fatalities has been revised so significantly between provisional statistics and final statistics in recent years – **in most years the BAC levels for drivers received after the provisional statistics were published tend to be lower than for the drivers used to create the provisional statistics.** This meant that the provisional statistics were overestimating the total number of drivers over the drink drive limit in comparison with the final estimates.

The best way of dealing with and representing uncertainty is to provide a range of values or confidence intervals around a central estimate. The new method that is being reported now is to give **just a range of values for the first provisional estimate**, as this minimises the risk of producing a central estimate that will have to be revised by a significant amount, as has been done in recent years. **The second provisional and final statistics include a central estimate, plus a 95% confidence interval.**

The confidence interval gives a range in which we are 95 per cent confident that the 'true' value falls (Technically, it indicates that if many samples of the same population were drawn, 95% of the results would fall between the confidence interval values).

In theory, **the range provided should narrow from the first provisional through the second provisional and to the final figures.** Depending on how the percentage of drivers over the BAC level changes, the actual values covered by the range might change as well. This can be noted in the 2013 figures: the first provisional range is between 210 and 310 deaths, the second provisional is between 230 and 290 deaths and the final estimate

### Further information

Ministry of Justice data on driving convictions can be found [here](#).

### Self-reported drink and drug driving

Data from the Crime Survey for England and Wales is available [here](#).

is between 220 and 260 with a best estimate of 240 deaths. In this case, the range has narrowed and the central estimate has been revised from 260 to 240 between the second provisional and final estimates. This is because the failure rate remained fairly static between the first and second provisional – starting at 18.3 per cent and rising slightly to 18.5 per cent, but then fell to 16.6 per cent for the final estimates.

**The number of casualties who are seriously or slightly injured is less uncertain than the number of fatalities.** Whereas 59 per cent of all fatalities in 2013 occurred in an accident where at least one motor vehicle driver died, only 1.1 per cent of serious injuries and 0.3 per cent of slight injuries occurred with the death of a driver. For these severity types, therefore, **almost all of the drink drive information comes from breath tests** rather than coroners' reports, meaning that the **uncertainty drops to almost negligible levels.**

## 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 (see [uncertainty section](#) for more detail).

### Provisional vs final estimates

As it takes around 18 months from year-end to collect the toxicology sample, provisional estimates which are based on limited samples of data are published in August and February (see [provisional estimates](#) section for more detail). Provisional estimates for 2013 were published in February 2015 (see [here](#)). Compared to these estimates the final estimates for 2013 published here show 20 fewer deaths and 10 extra slight casualties with serious injuries unchanged.

### 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 notes

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/assessment-reports/index.html](http://www.statisticsauthority.gov.uk/assessment/assessment/assessment-reports/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: [www.gov.uk/government/publications/road-accident-and-safety-statistics-pre-release-access-list](http://www.gov.uk/government/publications/road-accident-and-safety-statistics-pre-release-access-list).

### Next release

Updated 2014 provisional estimates for casualties in reported drink drive accidents will be published in February 2016 and will include central estimates and ranges.