



# Reported Road Casualties in Great Britain: 2012 Annual Report

## Overview and trends in reported road casualties

### Summary

This article reviews the main trends in the number of reported road accident casualties in Great Britain in 2012 compared with recent years. Figures are primarily derived from information about accidents reported to the police. In 2012:

- There were a total of 195,723 casualties of all severities in road accidents reported to the police. This was 4 per cent lower than in 2011. Of these, 1,754 people were killed in 2012, down 8 per cent from 2011 and a new record low. There were 23,039 seriously injured casualties (down by less than 1 per cent from 2011, but up from 2010) and 170,930 slightly injured casualties.
- The number of fatalities in 2012 fell for all road user groups except pedal cyclists (up from 107 in 2011 to 118 in 2012) and bus and coach occupants. Pedestrian fatalities fell by 7 per cent, motorcycle fatalities fell by 9 per cent, car occupant fatalities fell by 9 per cent, and goods vehicle occupant fatalities remained the same as in 2011.

### Changes in comparison to the 2005-09 average

The average over the five-year period from 2005 to 2009 is used as a basis for comparison when considering road safety trends over a longer period and used as a baseline for the Outcomes Framework for the Strategic Framework for Road Safety<sup>1</sup>.

Compared with the 2005-2009 average:

- The total number of fatalities in 2012 was 38 per cent lower than the 2005-09 average. The number of people killed or seriously injured was down by 17 per cent and the total number of casualties across all severities was down by 20 per cent.
- A total of 61 children (aged under 15 years old) were killed in reported road traffic accidents in 2012, up slightly from 60 in 2010, but down 52 per cent from the 2005-09 average.

Figures for the Strategic Framework for Road Safety outcome indicators can be found in table [RAS41001](#). In addition a table summarising key figures showing long term trends in road accident casualties compared with traffic is in table [RAS40006](#).

<sup>1</sup> <https://www.gov.uk/government/publications/strategic-framework-for-road-safety>

## Part 1: Trends in reported road accident casualties

This article is based on information about accidents reported to the police. However, it has long been known that a significant proportion of non fatal accidents are not reported and this should be borne in mind when using and analysing the data throughout this publication. We have released a new estimate, derived from survey data, of the total number of road casualties, with a range between 630– 790 thousand and a central estimate of 710 thousand. More details on this estimate and other sources of data on road casualties, in particular hospital admissions can be found in other articles in this report.

**Table [RAS30059](#): Reported road accident casualties by severity, Great Britain: 2010 to 2012**

	Number				2012 Percentage change over:	
	2005-09 average	2010	2011	2012	2011	2005-09 average
Killed	2,816	1,850	1,901	<b>1,754</b>	-8	<b>-38</b>
of which children	127	55	60	<b>61</b>	2	<b>-52</b>
Seriously injured	27,225	22,660	23,122	<b>23,039</b>	0	<b>-15</b>
Killed or seriously injured	30,041	24,510	25,023	<b>24,793</b>	-1	<b>-17</b>
of which children	3,067	2,502	2,412	<b>2,272</b>	-6	<b>-26</b>
Slightly injured	216,010	184,138	178,927	<b>170,930</b>	-4	<b>-21</b>
All severities	246,050	208,648	203,950	<b>195,723</b>	-4	<b>-20</b>
Traffic <sup>1</sup>	313	306	307	<b>306</b>	0	<b>-2</b>
KSI rate <sup>1</sup>	96	80	82	<b>81</b>	-1	<b>-15</b>
Slight casualty rate <sup>1</sup>	690	601	583	<b>559</b>	-4	<b>-19</b>

<sup>1</sup> Traffic in billion vehicle miles; rates per billion vehicle miles, rounded to the nearest whole number.

Chart 1 shows the trends in reported fatal, serious and slight casualties. In the early part of this series, between 1990 and 1995, fatalities fell more quickly than serious injuries (at around 7 per cent per year for fatalities and 5 per cent per year for serious injuries). In the latter half of the 1990s and through to 2005, this trend reversed with serious injuries falling by around 4 per cent by year in comparison with a 1 per cent per year average for fatalities.

After 2006, though, the pattern reversed once again and more markedly than before. Since 2006, the number of people killed each year has fallen on average by 9 per cent per year. The number of serious injuries, however, has only fallen by 4 per cent per year on average.

In comparison with this, the number of slightly injured casualties rose until 2000 and has fallen every year since.

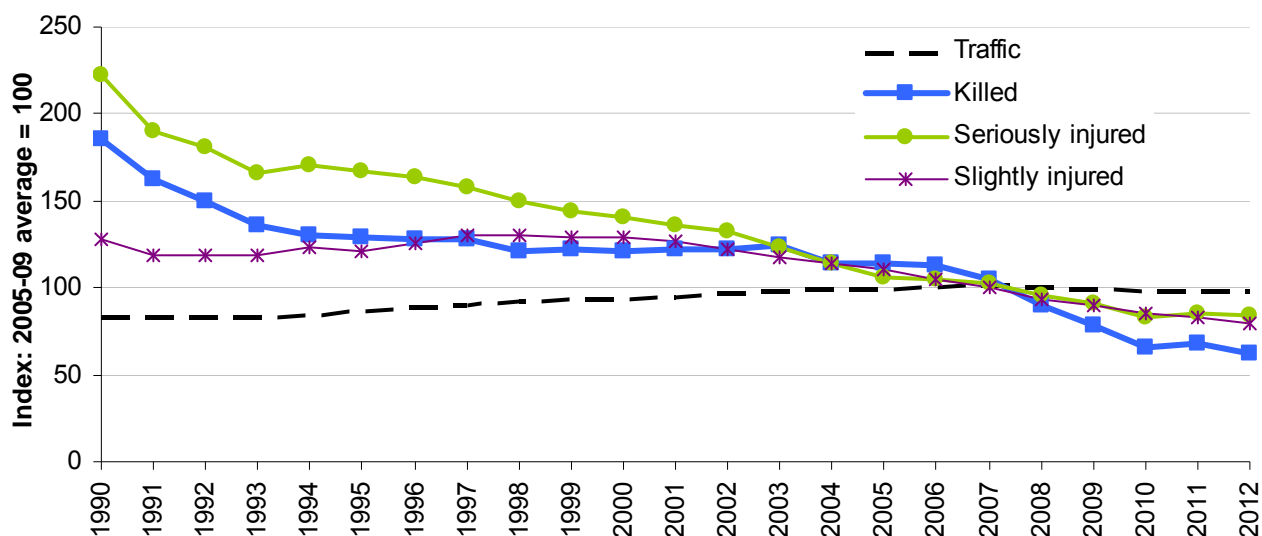
The reasons behind the differences between the different severity types have not yet been fully explained.<sup>2</sup> This is a potential area of work which might be addressed in a future annual report.

Between 2011 and 2012 the number of people seriously injured in reported road traffic accidents fell by just under 0.5 per cent, from 23,122 to 23,039. Aside from the rise from 2010

<sup>2</sup> Some work has been completed in the area. See, for instance, Lloyd, L, et al, 2013, *Investigating the reduction in fatal accidents in Great Britain from 2007-2010*, TRL Report PPR663.

to 2011, this was the lowest fall in the number of serious injuries since 1994. Although the number of seriously injured casualties fell in 2012, the 2010 total of 22,660 still remains the record low.

**Chart 1: Traffic and reported casualties by severity, Great Britain: 1990 to 2012**



Car occupants still make up the largest single road user group of seriously and slightly injured casualties (36 per cent of serious and 65 per cent of slight). However, the vulnerable road user groups, and especially motorcyclists and pedal cyclists make up considerably larger proportions of the seriously injured casualties. This is covered in more detail in the section on **vulnerable road users** later on.

Further details of the number of casualties of each severity by road user type can be found in table [RAS30001](#).

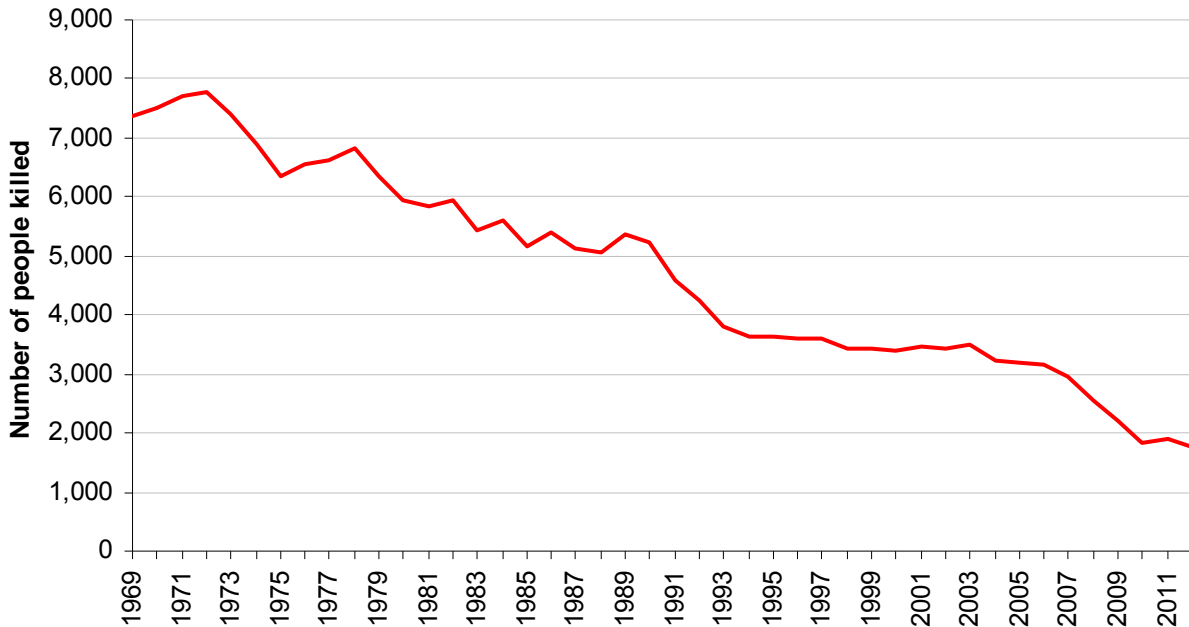
## Fatalities

### Facts about fatalities

- There were a total of 1,754 fatalities in road accidents in 2012, 147 fewer than 2011 (an 8 per cent decrease). This is the lowest number of deaths since records began and is a return to the long term downward trend.
- The number of deaths works out at an average of almost five a day and 34 a week.
- In 2012, the number of fatalities were between 38 and 43 per cent below the 2005-09 average for the main road user groups (pedestrians, motorcycle users and car occupants), except for pedal cyclists, which was 9 per cent lower than the 2005-09 average.
- Between 2011 and 2012 fatalities fell for all of the main road user groups except for pedal cyclists, which rose by 10 per cent. Car occupant and motorcyclist fatalities each fell by 9 per cent, pedestrian fatalities fell by 7 per cent, pedal cyclists by 4 per cent and 22 per cent for bus and coach occupants.
- The number of children killed in reported road accidents has fallen by considerably more than the overall fatalities figure, by 52 per cent from the 2005-09 average. However, between 2011 and 2012, the number of children killed rose by 1.

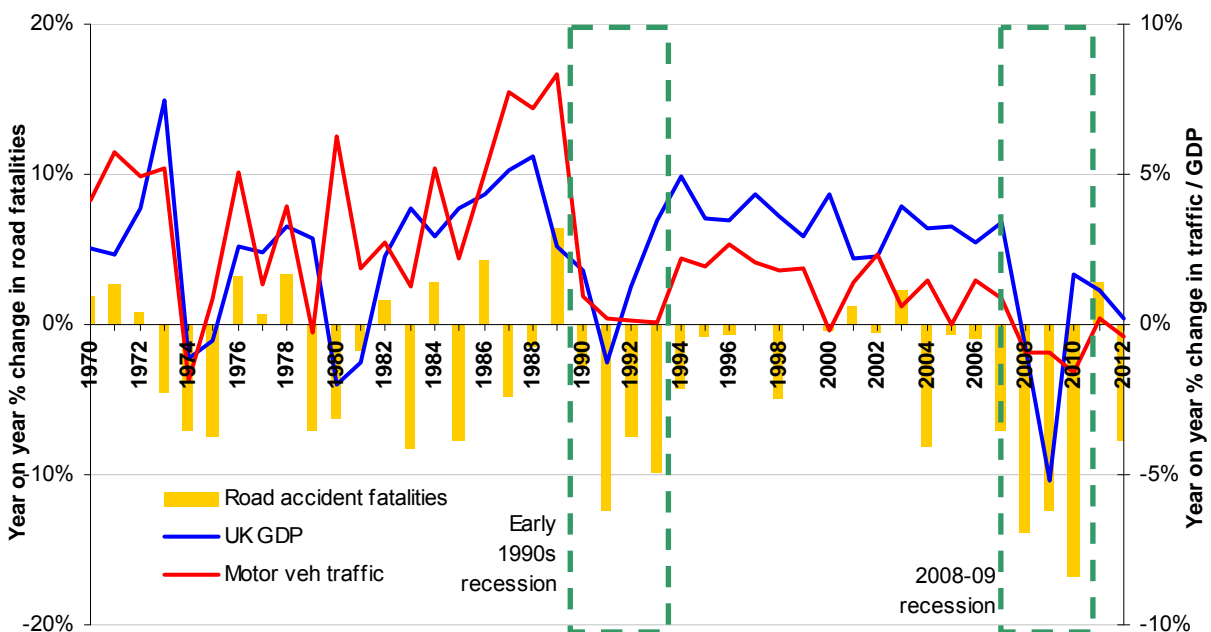
Over the long term, as shown in Chart 2, the number of fatalities in reported road accidents on British roads has fallen significantly. Since 1979 there have been two main periods of marked falls: 1990 to 1994, and 2006 to 2010. Within each of these five year periods, the number of people killed fell by over 30 per cent.

**Chart 2: Number of people killed in reported road accidents, Great Britain: 1969 to 2012**



It is notable, as shown in Chart 3, that the two periods with strong falls in the number of deaths coincided with recessions (1990-92 and 2008-09). Although they are not always directly linked, there is a relationship between the performance of the economy in Great Britain and the level of traffic on the roads, especially for commercial vehicles. Furthermore, there is a relationship (albeit, again, not direct) between volumes of traffic and the number of road traffic accidents.

**Chart 3: Annual percentage change in number of reported road accident fatalities, GB motor vehicle traffic and UK GDP: 1970 to 2012**



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However, as the number of fatalities has been falling even during periods when both GDP and traffic were growing, the relationship between the economy and road accident fatalities is neither simple nor linear. What can be concluded, though, is that although there are other reasons for the large drop in fatalities over the last forty years, economic recessions have seemingly accelerated decreases in road accident deaths.

There are a number of factors which are likely to have contributed to falling numbers of people killed or injured in reported road traffic accidents. As well as economic factors mentioned above, there is evidence that the average traffic speed in free-flow areas as well as the proportion of drivers exceeding the speed limit has decreased over the last decade<sup>3</sup>. This might not only help drivers to avoid accidents altogether, but also might reduce the severity and number of casualties when they do occur. Technological and engineering improvements to vehicles and highways will have played a similar rôle in both avoiding accidents and minimising their consequences. Improved education and training will have produced better and safer drivers. And finally improvements in trauma care (and in particular the creation of major trauma centres in England) will have helped to save lives once an accident has taken place.

The return to the long term downward trend in fatalities in 2012 after the increase between 2010 and 2011 reinforces the hypothesis that the 2010 figures were affected by the weather. This, along with effect weather patterns had on the 2012 figures, is discussed later in this article. Further details on the weather in 2010 can be found in the 2011 annual report<sup>4</sup>.

Many of the general trends found in previous years hold true for 2012. For instance, most fatalities (almost 60 per cent) occur on rural roads, with 38 per cent occurring on rural A roads and a further 21 per cent on other rural roads. This is considerably higher than the 42 per cent of traffic which is found on these roads.

In contrast with this, urban roads carried 38 per cent of traffic, but had 36 per cent of fatalities and 61 per cent of all casualties.

Only 5 per cent of fatalities and casualties occurred on motorways, despite them carrying 20 per cent of traffic.

Similarly, as in previous years, around 46 per cent of all fatalities were of car occupants (801). Of the remaining 953 deaths, 420 were pedestrians (24 per cent), 328 were motorcycle users (19 per cent), 118 were pedal cyclists (7 per cent), and 87 were goods vehicle, bus & coach or other vehicle occupants (5 per cent). A full breakdown of fatalities by road user type can be found in table [RAS30060](#).

Further information on similar trends can be found in historical annual reports.

Road traffic in 2012 was 0.4 per cent lower than in 2011<sup>5</sup>. Given that traffic only increased by 0.2 per cent between 2010 and 2011, this suggests that there has been relatively little change in the volume of traffic on the roads over the past couple of years.

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<sup>3</sup> <https://www.gov.uk/government/organisations/department-for-transport/series/speeds-statistics>

<sup>4</sup> <https://www.gov.uk/government/publications/reported-road-casualties-great-britain-annual-report-2011>

<sup>5</sup> Table [TRA0101](#) and <https://www.gov.uk/government/organisations/department-for-transport/series/road-traffic-statistics>

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As traffic volumes decreased slightly and the number of fatalities fell, the fatality rate fell by 7 per cent to 6 deaths per billion vehicle miles in 2012. However, the rate varies considerably for different road user groups, from 2.3 deaths per billion miles for car drivers<sup>6</sup> to 112 deaths per billion miles for motorcycle riders.

### **Killed or seriously injured (KSI) casualties**

#### **Facts about KSI casualties**

- The number of people killed or seriously injured (KSI) in accidents reported to the police fell by 1 per cent between 2011 and 2012. This figure is now 17 percent lower than the 2005-09 average.
- Between 2011 and 2012 KSI casualties increased for pedestrians, pedal cyclists and goods vehicles by 1, 5 and 5 per cent respectively.
- The number of KSI casualties fell for other road users, including car occupants which were 2 per cent lower in 2012 and motorcycle users which were 5 per cent lower.
- Compared with the 2005-09 average, there have been reductions in the number of reported KSI casualties (of between 12 and 31 per cent) for all of the main road user types, with the exception of pedal cyclists.
- Pedal cycle KSI casualties have risen steadily since 2004 as have cycling traffic levels. In 2012 the number was 32 per cent higher than the 2005-09 average; over the same period pedal cycle traffic increased by 12 per cent<sup>7</sup>.
- Around 3 out of every 8 people killed or seriously injured are car occupants.

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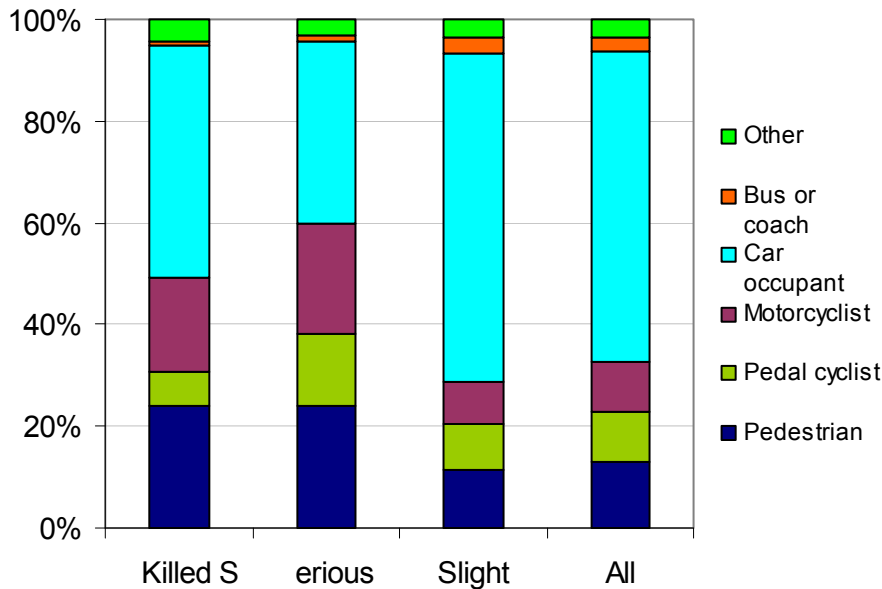
<sup>6</sup> The rate for bus & coach, van and HGV drivers are all lower than car drivers, but account for a very small proportion of the fatalities. See table [RAS30013](#) for further details.

<sup>7</sup> The 12% figure is based on traffic estimates, though the National Travel Survey ([NTS0305](#)) suggests that the average distance cycled per person increased by 30% between 2005-09 and 2012.

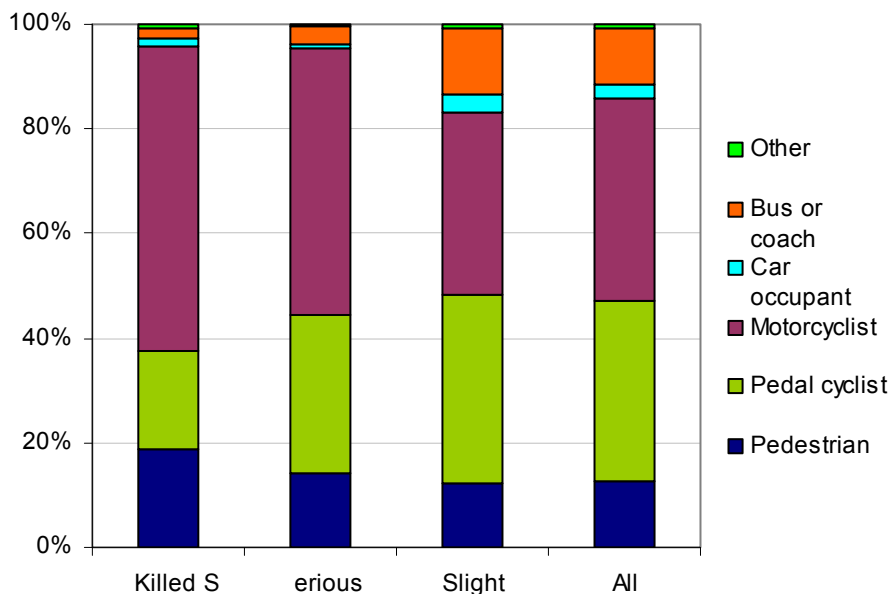
## Part 2: Reported casualties by road user type

Car occupants make up the largest group of road accident casualties across all severities, as shown in Chart 4. However, there is a marked difference in the distribution of casualties for each road user type between the three separate severities. The three vulnerable road user groups (pedestrians, pedal cyclists and motorcyclists) between them account for almost 50 per cent of all deaths and 60 per cent of all seriously injured casualties.

**Chart 4: Proportion of reported casualties by road user type and severity, Great Britain: 2012**



**Chart 5: Proportion of reported casualties by road user type and severity, adjusted for distance travelled per year, Great Britain: 2012**



However, vulnerable road users only account for around 29 per cent of slightly injured casualties. This might not be indicative of anything to do with accidents and casualties, but rather an artefact of underreporting. Pedal cyclists and pedestrians, especially slightly injured casualties, are both road user groups who are more likely to be underreported in the road accident data collected by the police. Therefore the data held in the database might under-

represent these groups.

Chart 5 adjusts the casualty proportions to take into account the relative distance driven, cycled or walked for each mode.<sup>8</sup> The net effect of making this adjustment is that the road user types at higher risk account for a greater proportion of the casualties. This is a similar way of regarding casualties as looking at rates (i.e. number of casualties per mile driven).

Once distance travelled is taken into account, the vulnerable road users account for about 95 per cent of KSI casualties. Of these, motorcycle users make up the greatest block.

### Relative risk for vulnerable road users

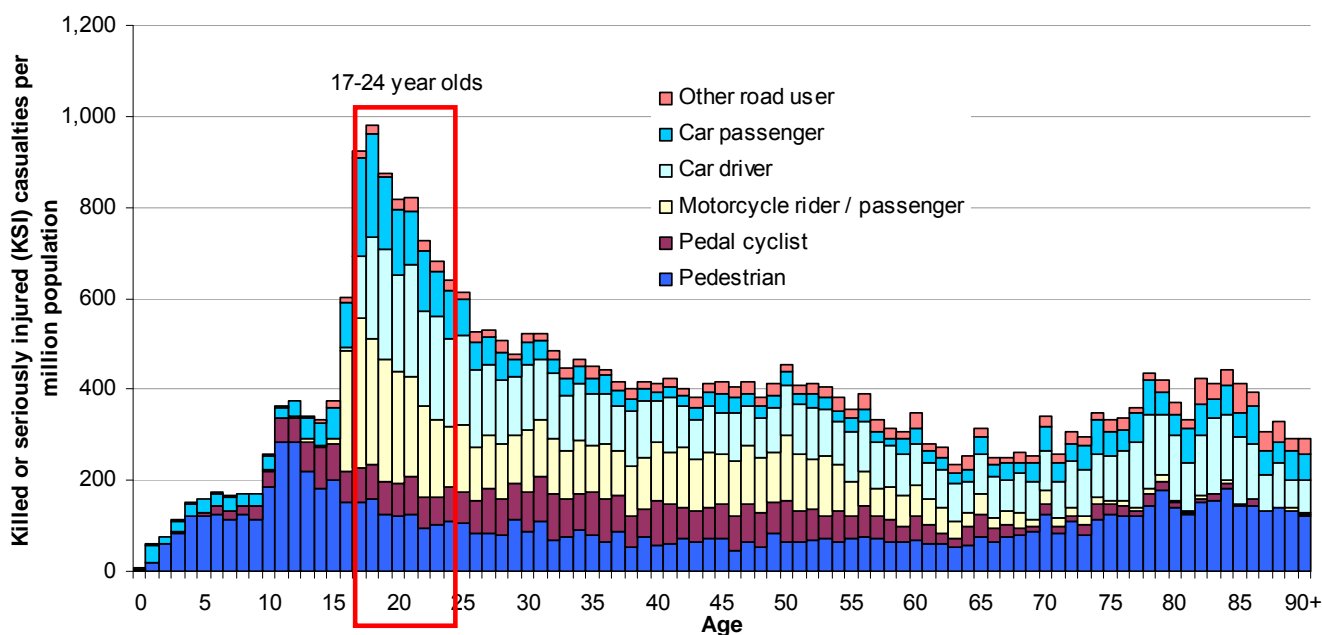
- Motorcycle users, per mile ridden, are roughly 35 times more likely to be killed in a road traffic accident than car occupants.
- Pedestrians and pedal cyclists, per mile walked and cycled respectively, are roughly 11 times more likely to be killed in a road accident than car occupants.
- Motorcyclists are over 50 times and pedal cyclists 30 times more likely to be seriously injured in a reported road accident than a car occupant.

Chart 6 shows the number of KSI casualties by age in 2012 per million population. The patterns which stand out are the step jumps in casualties at 15, 16 and 17, followed by a high rate of casualties for people aged between 17 and their mid-twenties. The three ages with highest rates are 17 to 19, typically ages when people are first learning to drive and passing their driving tests.

The KSI casualty rate drops off quite sharply during the mid-twenties, and then gradually decreases until it flattens out in the sixties and seventies. There is then a smaller spike for people in their late-seventies and eighties.

More information on **car drivers aged between 17 and 24** can be found later in this article.

**Chart 6: Number of KSI casualties per million population by age, Great Britain: 2012**



<sup>8</sup> Using National Travel Survey data, table [NTS0305](#)



## Child casualties (aged 0 to 15)

### Facts about child casualties

- In 2012, the number of children aged 0-15 killed or seriously injured was 2,352 – 6 per cent down from 2011 and 26 per cent lower than the 2005-09 average.
- Around two out of every three child KSI casualties were male. Fifty-six per cent of all child casualties were male.
- Pedestrians made up around 41 per cent of child casualties and 68 per cent of child KSI casualties. The number of pedestrian KSI casualties fell by 4 per cent to 1,545 in comparison with 2011.
- Compared with 2011, the number of child cyclist KSI casualties fell by 19 per cent to 324, though the number of deaths rose to 13.
- There were 346 car occupant child KSI casualties in 2012, up 3 per cent from 336 in 2011.
- In comparison with the 2005-09 average, the number of child KSI casualties fell for all road user types: by 35 per cent for car occupants, 33 per cent for pedal cyclists, 19 per cent for pedestrians and 61 per cent for all other road vehicles.
- The number of children aged 12-15 killed or seriously injured has fallen more than other child age groups, by 33 per cent since the 2005-09 average.

**Table RAS30062: Reported child casualties killed or seriously injured by road user type and age group, Great Britain: 2010 to 2012**

	Number				2012 Percentage change over:	
	2005-09 average	2010	2011	2012	2011	2005-09 average
Pedestrians	1,900	1,646	1,602	<b>1,545</b>	-4	<b>-19</b>
Pedal cyclists	485	398	398	<b>324</b>	-19	<b>-33</b>
Car users	534	360	336	<b>346</b>	3	<b>-35</b>
Other road users	147	98	76	<b>57</b>	-25	<b>-61</b>
Males 1,98	4	1,628	1,519	<b>1,483</b>	-2	<b>-25</b>
Females	1,082	874	893	<b>789</b>	-12	<b>-27</b>
Age 0-4	359	324	328	<b>308</b>	-6	<b>-14</b>
Age 5-8	576	504	514	<b>460</b>	-11	<b>-20</b>
Age 9-11	664	595	561	<b>515</b>	-8	<b>-22</b>
Age 12-15	1,469	1,079	1,009	<b>989</b>	-2	<b>-33</b>
All children (aged 0-15)	3,067	2,502	2,412	<b>2,272</b>	-6	<b>-26</b>

## Pedestrian casualties

### Facts about pedestrian casualties

- Total reported pedestrian casualties decreased by 4 per cent to 25,218 in 2012. This is 16 per cent below the 2005-09 average.
- Pedestrian fatalities fell by 7 per cent to 420 in 2012, though the number of pedestrian KSI casualties rose by 1 per cent between 2011 and 2012. The overall number of pedestrians killed in 2012 was 31 per cent below the 2005-09 average; the total number of pedestrian KSI casualties was 10 per cent below the 2005-09 average.
- The total number of child pedestrian casualties across all severities fell in 2012.
- Although the number of adult pedestrian fatalities fell (by 8 per cent for adults aged 16 to 59 and 1 per cent for adults aged 60 and over), the number of KSI casualties increased for adults (up 5 per cent for 16 to 59 year olds and up 3 per cent for people aged 60 and over).
- The pedestrian KSI casualty rate remained roughly level at 97 casualties per million population between 2011 and 2012. This is higher than the low of 93 casualties per million population in 2010. That year still remains the record low for the number of pedestrian fatalities and KSI casualties.

**Table [RAS30064](#): Reported pedestrian casualties by age, Great Britain: 2010 to 2012**

		Number				2012 Percentage change over:	
		2005-09 average	2010	2011	2012	2011	2005-09 average
Children (0-15)	Killed	57	26	33	<b>20</b>	-39	<b>-65</b>
	Serious	1,843	1,620	1,569	<b>1,525</b>	-3	<b>-17</b>
	Slight	7,607	6,283	6,205	<b>5,454</b>	-12	<b>-28</b>
	All	9,508	7,929	7,807	<b>6,999</b>	-10	<b>-26</b>
Adults (16-59)	Killed	301	224	236	<b>217</b>	-8	<b>-28</b>
	Serious	2,995	2,475	2,661	<b>2,790</b>	5	<b>-7</b>
	Slight	11,955	11,019	10,992	<b>10,730</b>	-2	<b>-10</b>
	All	15,251	13,718	13,889	<b>13,737</b>	-1	<b>-10</b>
Adults (60+)	Killed	253	155	184	<b>183</b>	-1	<b>-28</b>
	Serious	1,183	1,020	1,146	<b>1,184</b>	3	<b>0</b>
	Slight	2,800	2,427	2,583	<b>2,585</b>	0	<b>-8</b>
	All	4,236	3,602	3,913	<b>3,952</b>	1	<b>-7</b>
All <sup>1</sup>	Killed	613	405	453	<b>420</b>	-7	<b>-31</b>
	Serious	6,145	5,200	5,454	<b>5,559</b>	2	<b>-10</b>
	Slight	23,206	20,240	20,291	<b>19,239</b>	-5	<b>-17</b>
	All	29,965	25,845	26,198	<b>25,218</b>	-4	<b>-16</b>
Casualty rate per million population							
KSI		114	93	97	<b>97</b>	0	<b>-15</b>
Slight		392	335	333	<b>311</b>	-7	<b>-21</b>
All		506	427	430	<b>408</b>	-5	<b>-19</b>

<sup>1</sup> Includes cases where age was not reported.

Tables [RAS30024-RAS30028](#) provide further breakdowns of pedestrian casualties.

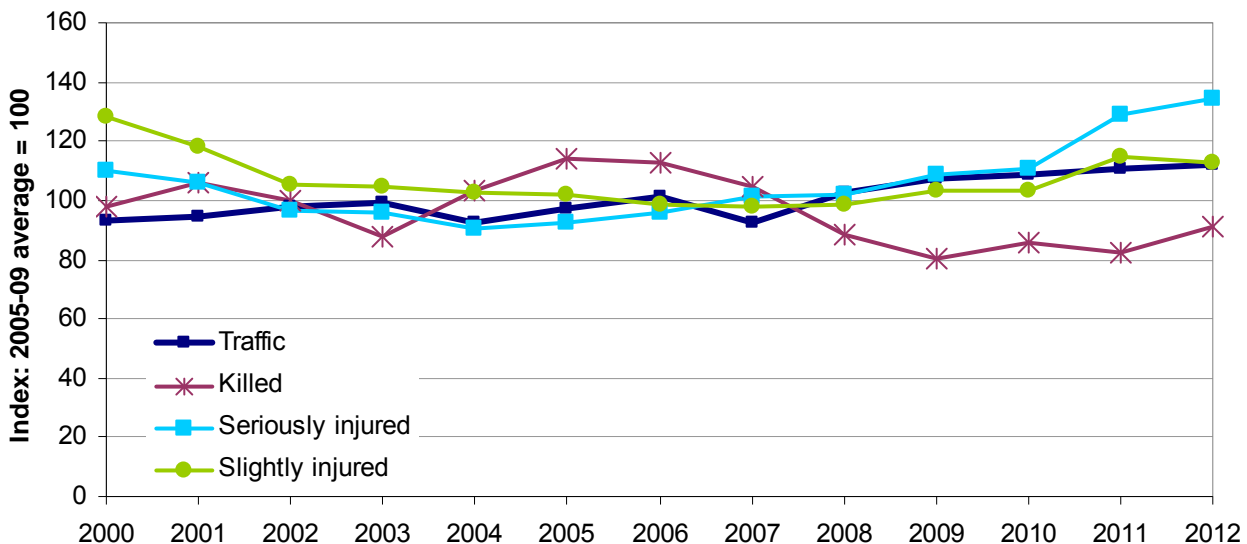
## Pedal cycle casualties

### Facts about pedal cycle casualties

- The overall number of reported pedal cycle casualties decreased by 1 per cent to 19,091 from 2011 to 2012. The 2012 total is 16 per cent higher than the 2005-09 average.
- A total of 118 pedal cyclists were killed in reported road accidents in 2012, nine more than in 2011. This is still 9 per cent lower than the 2005-09 average.
- The number of pedal cyclists who were seriously injured in 2011 rose by 4 per cent to 3,222 in 2012. The total number of pedal cyclists killed or seriously injured rose by 5 per cent between 2011 and 2012 and now stands at 32 per cent more than the 2005-09 average. This marks the eighth consecutive annual rise in pedal cyclist serious injuries.
- The number of pedal cyclists killed or seriously injured per billion miles cycled has risen by 18 per cent from the 2005-09 average to 1,074 casualties per billion vehicle miles. This is 3 per cent higher than in 2011.

Although the number of pedal cycle KSI casualties has been increasing since 2004, pedal cycle traffic has also been on a general increase. Road traffic estimates have shown gradual increases in the distance cycled in Great Britain, with a 1.2 per cent rise between 2011 and 2012 to 3.1 billion vehicle miles. This figure is over 12 per cent higher than the 2005-09 average. The National Travel Survey ([NTS0305](#)) suggests that the growth over this period is actually closer to 23 per cent. We intend to carry out more work to assess whether NTS mileages are more suitable for assessing casualties rates and distance travelled for pedal cyclists than the traffic estimates.

**Chart 7: Pedal cycle traffic and reported casualties by severity, Great Britain: 2000 to 2012**



Other trends regarding pedal cyclist casualties are similar to those found in previous years (e.g. 92 per cent of all pedal cyclist deaths and 81 per cent of all casualties in 2012 were male). Further details on pedal cycle casualties are provided in any [casualty table](#) containing road user type breakdowns and specifically in [RAS30065](#). Table [RAS40004](#) provides further information about the types of vehicles involved in accidents with pedal cycles.

## Motorcycle user casualties

### Facts about motorcycle user casualties

- A total of 328 motorcycle users were killed in reported road traffic accidents in 2012. This represents a decrease of 9 per cent from 2011 and 40 per cent from the 2005-09 average. It is also the lowest number of motorcycle user deaths on record.
- The number of motorcycle users seriously injured fell by 5 per cent from 2011 to 2012 and the total number of casualties fell by 4 per cent between the two years.
- Motorcycle traffic decreased by almost 2 per cent between 2011 and 2012 and by almost 13 per cent from the 2005-09 average.
- The number of motorcycle users who were killed or seriously injured per billion vehicle miles fell by 3 per cent to 1,884 in 2012. Motorcycle users remain the road user group with the highest rate of accidents and casualties per mile travelled.
- Over two thirds of motorcycle fatalities occurred in rural areas, compared with under half for serious motorcycle casualties and under a third for slight motorcycle casualties.
- Men make up around 92 per cent of all motorcycle user casualties.
- A significant number (around 30 per cent) of non-fatal motorcyclist casualties are younger riders (aged up to 25 years old) on smaller-engined motorcycles (up to 125 cc). However, the peak age of motorcyclist fatalities are older riders (aged between 31 and 55) on large motorcycles with engine sizes over 125 cc (accounting for around 45 per cent of all fatalities).

**Table [RAS30066](#): Reported motorcycle casualties, Great Britain 2012**

	Number				2012 Percentage change over:	
	2005-09 average	2010	2011	2012	2011	2005-09 average
Killed	544	403	362	<b>328</b>	-9	<b>-40</b>
Serious	5,776	4,780	5,247	<b>5,000</b>	-5	<b>-13</b>
Slight	16,452	13,503	14,541	<b>13,982</b>	-4	<b>-15</b>
Total	22,772	18,686	20,150	<b>19,310</b>	-4	<b>-15</b>
Motorcycle traffic <sup>1</sup>	3.3	2.9	2.9	<b>2.8</b>	-2	<b>-14</b>
Casualty rate <sup>2</sup>						
KSI	1,951	1,814	1,945	<b>1,884</b>	-3	<b>-3</b>
Slight	5,079	4,727	5,041	<b>4,944</b>	-2	<b>-3</b>
All	7,029	6,541	6,986	<b>6,828</b>	-2	<b>-3</b>

<sup>1</sup> Billion vehicle miles.

<sup>2</sup> Rate per billion vehicle miles.

Further details on motorcycle user casualties are provided in any [casualty table](#) containing road user type breakdowns and specifically in [RAS30066](#). Table [RAS40004](#) provides further information about the types of vehicles involved in accidents with motorcycles. [RAS50015](#) provides information on contributory factors to motorcycle accidents and [RAS51021](#) provides information on breath alcohol tests.

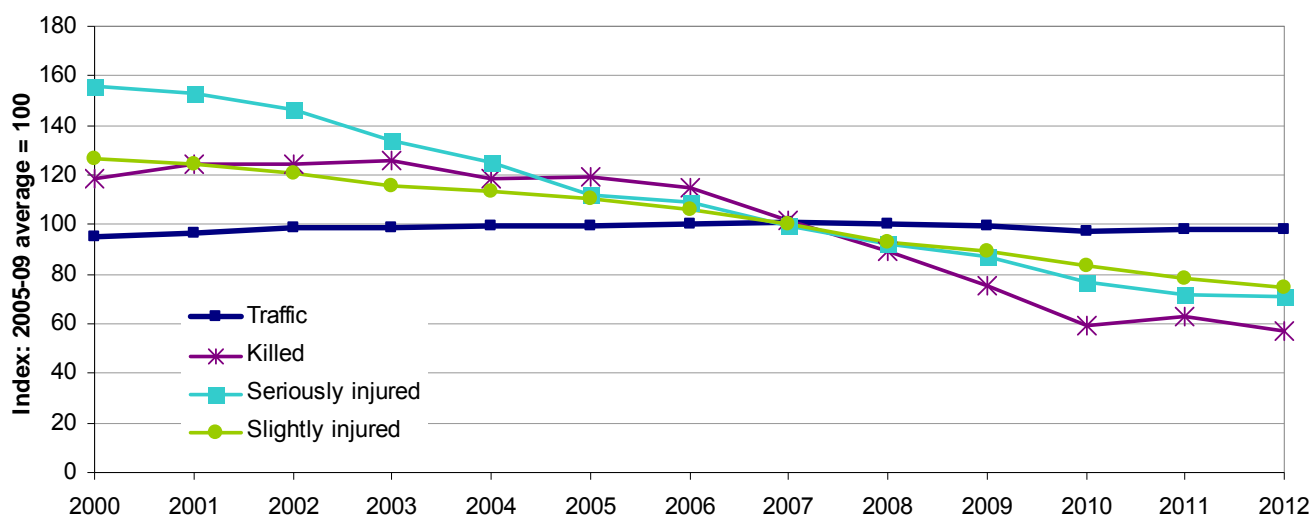
## Car occupant casualties

### Facts about car occupant casualties

- There was a 9 per cent fall to 801 in the number of car occupants killed in 2012 in comparison with 2011. This figure is 43 per cent lower than the 2005-09 average.
- The number of car occupants seriously injured in 2012 was 1 per cent lower than in 2011 and 29 per cent lower than the 2005-09 average. The number of seriously injured casualties has fallen in every year since 1996.
- The total number of car occupant casualties fell by 4 per cent to 119,708 in 2012.
- Around 68 per cent of car occupant fatalities were car drivers. Car drivers make up a very similar proportion of the other severities as well.
- The number of casualties has been dropping against a background of relatively flat car traffic. Cars drove around 240 billion vehicle miles in Great Britain during 2012, almost unchanged from 2011 and 2010. Today, car traffic is around 2 per cent lower than it was in the 2005-09 average.
- In 2012, there were around 38 KSI casualties per billion vehicle miles and an overall rate of 498 casualties per billion vehicle miles. These figures make travelling in a car one of the safest forms of road transport in comparison with other modes.

Chart 8 shows the decreasing number of car occupant casualties since 2000. One of the most notable patterns is the sharp decline in the number of fatalities in 2007 through to 2010 and very slight decrease since then. One hypothesis for the rapid decrease over this period is the economic downturn and recession from 2007 and heavy snowfall in 2010.

**Chart 8: Car traffic and reported casualties by severity, Great Britain: 2000 to 2012**



One other point of interest is that the almost half of the fatality reductions between 2007 and 2010 came within the 16 to 25 year old group (see the 2011 annual report and table [RAS20002](#) for more details). As is discussed briefly in the section on **young car drivers** later on, there is evidence from the NTS that the number of young people (and especially young males) who hold a full driving licence and how far they drive on average each year has been falling over recent years. This might be a reason for the falls in fatalities (and casualties of all severities) within this age group.

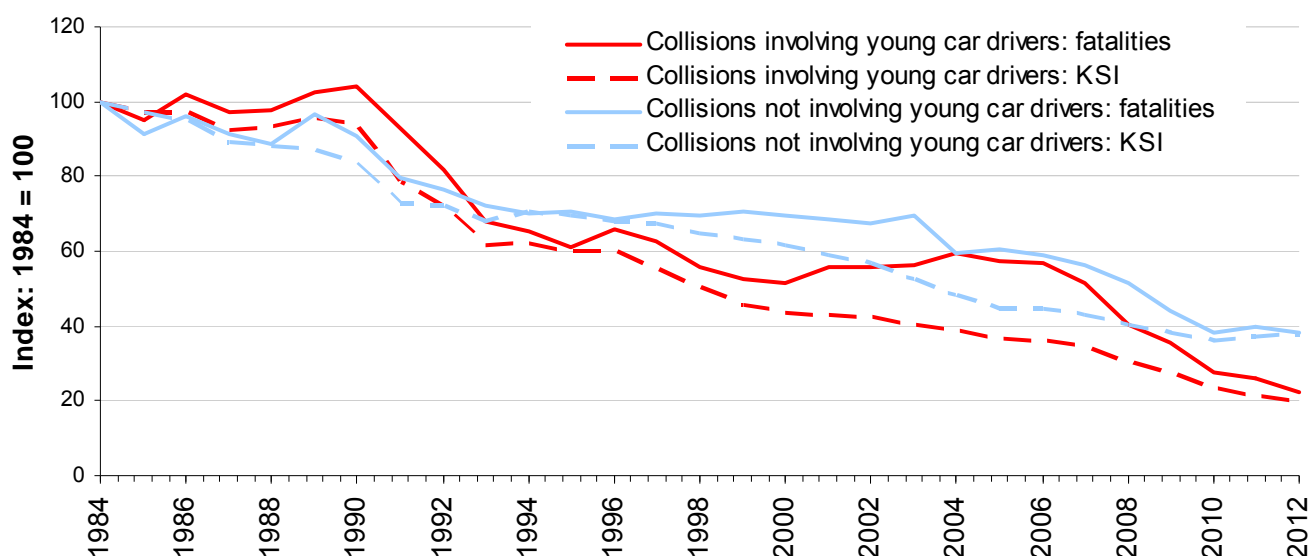
## Young car drivers (aged 17 to 24)

### Facts about young car drivers

- A fifth of people killed or seriously injured in a reported road accident in Great Britain during 2012 were involved in a collision where at least one of the cars was driven by a young driver.
- Around 22 per cent of all accidents involved at least one young driver. The 32,400 accidents involving at least one young car driver resulted in 350 deaths and more than 4,100 seriously injured casualties.
- Nearly a quarter of all car drivers (133 out of 542 drivers) who died in 2012 were young drivers themselves.
- People aged between 17 and 24 make up around 8 per cent of all full driving licence holders in Great Britain. They also drive, on average, about half the distance of older drivers each year.<sup>9</sup>
- Young car drivers account for an estimated 3 to 5 per cent of all car miles driven each year. Therefore the rate they are involved in accidents is considerably higher than would be expected given the distance they drive.

As shown in Chart 9, the number of KSI casualties from accidents involving at least one young car driver has fallen much quicker than KSI casualties from accidents involving no young car drivers over recent years. In particular, the number of fatalities in accidents involving young car drivers has dropped significantly since the start of the 2007 economic downturn and recession.

**Chart 9: Number of KSI casualties in accidents involving and not involving young car drivers, Great Britain: 1984 to 2012**



More information on young car drivers is available in the [factsheet on young drivers](#). In addition, further details, analyses and discussion about accidents involving young car drivers will appear in the forthcoming **green paper on young drivers**. This is due to be published by the Department for Transport later in 2013.

<sup>9</sup> National Travel Survey - <https://www.gov.uk/government/organisations/department-for-transport/series/national-travel-survey-statistics>

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## Other road user casualties

**Reported bus and coach** occupant casualties decreased by 15 per cent compared with 2011, and were 26 per cent lower in 2012 than the 2005-09 average. The number of fatalities increased from 7 in 2011 to 11 in 2012. The number of serious injuries fell by 4 per cent in 2012 from 2011 and was 21 per cent lower than the 2005-09 average. Care should be exercised when comparing these percentage changes with other road user types since these numbers are small and are therefore liable to fluctuations.

In 2012, bus and coach traffic fell by 6 per cent from the 2011 level. This is 15 per cent lower than the 2005-09 average.

**Reported light goods vehicle** occupant casualties in 2012 were less than 1 per cent higher than in 2011, but were still 16 per cent lower than the 2005-09 average. Light goods traffic remained almost the same in 2012 as 2011, and was around 2 per cent higher than the 2005-09 average.

There were 33 deaths among light goods vehicles in 2012, almost the same as the 34 deaths in 2011. This represents a 32 per cent decrease compared to the 2005-09 average.

A total of 12,575 light goods vehicles were involved accidents in 2012, 170 of which resulted in at least one death. The 11,942 accidents involving light goods vehicles resulted in 170 deaths, 1,757 seriously injured casualties and 15,040 slightly injured casualties.

**Reported heavy goods vehicle** occupant casualties decreased by 5 per cent from 2010 and 41 per cent compared with the 2005-09 average. Fatalities increased by one death to 29, 21 per cent below the 2005-09 average.

Heavy goods vehicle traffic has decreased by 2 per cent from 2011. Traffic was 12 per cent lower than the 2005-09 average, resulting in the overall reduction in casualty rate for heavy goods vehicle occupants.

Heavy good vehicles were involved in 6,305 accidents in 2011, which was a 6 per cent decrease from 6,709 accidents in 2011. These accidents resulted in 271 fatalities (5 per cent more than 2011), 1,077 serious injuries (the same as 2011) and 7,350 slight injuries (8 per cent fewer).

Left hand drive heavy goods vehicles were involved in 558 accidents in 2012, an increase of 3.7 per cent compared with 2011. These accidents resulted in 16 fatalities, 56 serious injuries and 707 slight injuries.

Further information on other road user casualties is provided in table [RAS30068](#). Table [RAS40004](#) provides a breakdown of the number of each type of vehicle involved in each severity of accident and the number of casualties these accidents resulted in.

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## Part 3 – The effect of weather patterns on road accidents and casualties

As the number of accidents and casualties on Britain's roads decrease, the trends and patterns observed become more susceptible to external events.

In recent years, there have been two main large-scale weather events that have affected the number of road casualties. In 2010 there were two periods of significant and extended snowfall throughout Britain. The net effect of the snow was probably to reduce the number of reported road casualties that year. The year 2010 still remains the year with the record low number of serious injuries and KSI casualties.

Secondly to this, 2012 was an unusually wet year. As discussed in [Reported Road Casualties Great Britain: 2012 main results](#), 2012 was the second wettest year on record and the second quarter, during the months of April, May and June, was the wettest quarter 2 on record. Again, the effect of the heavy rainfall, especially as it fell during late spring and most of summer, would have been to discourage people from using the road, thereby lowering the number of casualties.

It is unlikely that 2013 will be immune from weather effects. As reported in the [quarter 1 2013 provisional results](#), the contrasting conditions between January to March 2012 and the same period in 2013 helped to produce a fall across every road user group for every severity type. Despite the rain that came later in 2012, the first three months of the year, and especially March, were unseasonably warm. These conditions would probably have led to more road users, and especially pedal- and motorcyclists, travelling on the roads. In contrast, the first three months of 2013 were much colder with March 2013 actually being colder, on average, than both January and February. This would probably have had the opposite effect of discouraging vulnerable road users from travelling. The overall result of these year-on-year changes will have been to reduce the number of casualties in the first quarter of 2013 in comparison with the first quarter of 2012.

Although the behaviour of all road user groups are likely to be influenced by the weather, by the very nature of how exposed to the elements pedestrians, pedal cyclists and motorcyclists are, these groups are likely to be more sensitive to abnormal weather.

In order to better explain how the weather patterns and casualty trends interact, we have started providing commentary using Met Office data, where applicable. This will continue in future publications where analysis shows unusual or abnormal weather patterns have occurred. In addition, work has been undertaken by a Masters degree student to study the relationship between unusual periods of weather and the road casualty figures. Due to university dissertation timings, this work has not been completed and released in time to include in the annual report. However, we intend to publish something more detailed using the analysis and any resulting model in late 2013 or early 2014. Furthermore, if the model proves to be useful we intend to share it with external bodies and other countries so it can help with others' understanding of weather relationships.



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## Background notes

Detailed statistics (tables and charts) and articles on reported road accidents and casualties, the valuation of accidents and casualties, and accidents with drivers over the drink drive limit can be found in the 2012 annual report at:

<https://www.gov.uk/government/publications/reported-road-casualties-great-britain-annual-report-2012> and <https://www.gov.uk/government/organisations/department-for-transport/series/road-accidents-and-safety-statistics>

1. The data in this article refer to accidents involving personal injury occurring on the public highway (including footways) in which at least one road vehicle or a vehicle in collision with a pedestrian is involved and which becomes known to the police within 30 days of its occurrence. The data are collected by police at the scene of an accident or in some cases reported by a member of the public at a police station.
2. **Strengths and weaknesses of the data.** 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.

The 2012 annual report includes an estimate of the total number of road casualties in Great Britain each year derived primarily from National Travel Survey (NTS) data. Our best estimate is within the range 630 thousand to 690 thousand with a central estimate of 710 thousand. See the article entitled **Survey data on road accidents** at <https://www.gov.uk/government/publications/reported-road-casualties-great-britain-annual-report-2012> for further details.

3. Further information about road accidents and safety statistics, including technical information and Notes & Definitions used in STATS19, and links to earlier material can be found at: <https://www.gov.uk/transport-statistics-notes-and-guidance-road-accident-and-safety>
4. 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 <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 25<sup>th</sup> July 2013. The Department will respond to the assessment in autumn 2013.
5. Details of Ministers and officials who receive pre-release access to these statistics up to 24 hours before release can be found here: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/48829/reported-road-casualties-gb-prerelease.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48829/reported-road-casualties-gb-prerelease.pdf)

## Annex: Table [RAS40006](#): Summary statistics, 2005-09 average, 2011 and 2012

### Summary statistics: GB 2012

	Number			2012 Percentage change over:	
	2005-09 average	2011	2012	2010	2005-09 average
<b>Casualties</b>					
Killed	2,816	1,901	1,754	-8	-38
Killed or seriously injured (KSI)	30,041	25,023	24,793	-1	-17
All casualties	246,050	203,950	195,723	-4	-20
<b>Vehicle traffic (billion vehicle miles) (inc pedal cycles)</b>	313.1	306.8	305.7	0	-2
<b>Population (million)</b>	59.2	61.4	61.9	1	4
<b>Accidents</b>					
Fatal	2,590	1,797	1,637	-9	-37
Fatal or serious	26,473	22,783	22,538	-1	-15
All accidents	180,831	151,474	145,571	-4	-19
<b>Casualties per accident</b>					
Fatal	1.94	1.84	1.79	-3	-7
Fatal or serious	1.54	1.44	1.44	0	-6
All accidents	1.36	1.35	1.34	0	-1
<b>Accident type</b>					
Fatal accidents					
Single vehicle (no pedestrian)	659	437	376	-14	-43
Single vehicle (with pedestrian)	515	385	366	-5	-29
Two vehicle	1,023	690	675	-2	-34
Three or more vehicles	394	285	220	-23	-44
All accidents					
Single vehicle (no pedestrian)	27,691	22,501	21,155	-6	-24
Single vehicle (with pedestrian)	27,208	23,811	22,931	-4	-16
Two vehicle	106,794	90,305	87,152	-3	-18
Three or more vehicles	19,138	14,857	14,333	-4	-25
<b>Casualties by road type</b>					
Fatalities on					
Motorways	173	106	88	-17	-49
Built-up roads	1,147	816	777	-5	-32
Non built-up roads	1,496	979	889	-9	-41
KSI on					
Motorways	1,140	846	742	-12	-35
Built-up roads	18,373	16,245	16,387	1	-11
Non built-up roads	10,528	7,932	7,664	-3	-27
All casualties on					
Motorways	12,423	9,742	9,163	-6	-26
Built-up roads	168,749	145,530	139,899	-4	-17
Non built-up roads	64,879	48,678	46,661	-4	-28
<b>Car occupants</b>					
Fatalities	1,407	883	801	-9	-43
Seriously injured	11,577	8,342	8,232	-1	-29
Slightly injured	147,683	115,699	110,675	-4	-25
Total	160,667	124,924	119,708	-4	-25
Car traffic (billion vehicle miles)	244.7	240.7	240.3	0	-2
Fatalities in accidents involving car drivers aged 17-24					
of which: Driver aged 17-24	286	148	133	-10	-53
Passenger of driver aged 17-24	200	93	71	-24	-65
Other road user	278	171	146	-15	-48
<b>Pedestrians</b>					
Fatalities					
of which: Children (0-15)	57	33	20	-39	-65
Adults (16-59)	301	236	217	-8	-28
Elderly (60+)	253	184	183	-1	-28
Seriously injured	6,145	5,454	5,559	2	-10
Slightly injured	23,206	20,291	19,239	-5	-17
Total	29,965	26,198	25,218	-4	-16

## Summary statistics: GB 2012 (continued)

	Number			2012 Percentage change over:	
	2005-09 average	2011	2012	2011	2005-09 average
<b>Motorcyclists</b>					
Fatalities	544	362	<b>328</b>	-9	<b>-40</b>
Seriously injured	5,776	5,247	<b>5,000</b>	-5	<b>-13</b>
Slightly injured	16,452	14,541	<b>13,982</b>	-4	<b>-15</b>
Total	22,772	20,150	<b>19,310</b>	-4	<b>-15</b>
Motorcycle traffic (billion vehicle miles)	3.2	2.9	<b>2.8</b>	-2	<b>-13</b>
Fatalities on					
Motorways	17	8	<b>4</b>	-50	<b>-76</b>
Built-up roads	208	153	<b>149</b>	-3	<b>-28</b>
Non built-up roads	320	201	<b>175</b>	-13	<b>-45</b>
KSI on					
Motorways	143	124	<b>101</b>	-19	<b>-29</b>
Built-up roads	3,865	3,444	<b>3,442</b>	0	<b>-11</b>
Non built-up roads	2,312	2,041	<b>1,785</b>	-13	<b>-23</b>
Motorcycles with engine size up to 125 cc					
Fatalities	82	60	<b>57</b>	-5	<b>-30</b>
Seriously injured	2,059	1,984	<b>1,983</b>	0	<b>-4</b>
Slightly injured	8,259	7,881	<b>7,843</b>	0	<b>-5</b>
Motorcycles with engine size over 125 cc					
Fatalities	462	302	<b>271</b>	-10	<b>-41</b>
Seriously injured	3,716	3,263	<b>3,011</b>	-8	<b>-19</b>
Slightly injured	8,194	6,660	<b>6,131</b>	-8	<b>-25</b>
<b>Pedal cyclists</b>					
Fatalities	130	107	<b>118</b>	10	<b>-9</b>
Seriously injured	2,398	3,085	<b>3,222</b>	4	<b>34</b>
Slightly injured	13,934	16,023	<b>15,751</b>	-2	<b>13</b>
Total	16,463	19,215	<b>19,091</b>	-1	<b>16</b>
Child (0-15) KSI	485	398	<b>324</b>	-19	<b>-33</b>
Adult (16+) KSI	2,001	2,750	<b>2,976</b>	8	<b>49</b>
Pedal cycle traffic (billion vehicle miles)	2.8	3.1	<b>3.1</b>	1	<b>12</b>
<b>Vans/Light Goods Vehicles (LGV)</b>					
Fatalities	49	34	<b>33</b>	-3	<b>-32</b>
Seriously injured	453	306	<b>330</b>	8	<b>-27</b>
Slightly injured	4,890	4,159	<b>4,170</b>	0	<b>-15</b>
Casualties in accidents involving at least one LGV					
Fatalities	246	191	<b>170</b>	-11	<b>-31</b>
KSI	2,154	1,872	<b>1,927</b>	3	<b>-11</b>
All casualties	19,409	17,359	<b>16,967</b>	-2	<b>-13</b>
LGV traffic (billion vehicle miles)	40.5	41.4	<b>41.3</b>	0	<b>2</b>
<b>Heavy Goods Vehicles (HGV)</b>					
Fatalities	37	28	<b>29</b>	4	<b>-21</b>
Seriously injured	277	167	<b>169</b>	1	<b>-39</b>
Slightly injured	1,946	1,220	<b>1,142</b>	-6	<b>-41</b>
Casualties in accidents involving at least one HGV					
Fatalities	395	257	<b>271</b>	5	<b>-31</b>
KSI	1,910	1,334	<b>1,348</b>	1	<b>-29</b>
All casualties	13,092	9,350	<b>8,723</b>	-7	<b>-33</b>
HGV traffic (billion vehicle miles)	17.7	15.9	<b>15.5</b>	-2	<b>-12</b>
<b>Children (aged 0-15)</b>					
Fatalities	127	60	<b>61</b>	2	<b>-52</b>
Male	80	40	<b>41</b>	3	<b>-49</b>
Female	47	20	<b>20</b>	0	<b>-58</b>
KSI	3,067	2,412	<b>2,272</b>	-6	<b>-26</b>
All casualties	24,021	19,474	<b>17,251</b>	-11	<b>-28</b>