Reported Road Casualties in Great Britain: Main Results 2012

This publication presents statistics on personal-injury accidents in 2012 on public roads (including footways) in Great Britain, which became known to the police.

Figures are derived from the ‘STATS 19’ forms completed by the police. These collect detailed data on individual personal-injury road accidents, covering the circumstances of the accident and the casualties and vehicles involved. The resulting data are supplied to local authorities and to the Department for Transport.

Figures for deaths refer to persons who sustained injuries which caused death within 30 days of the accident.

Summary statistics are published quarterly. A more comprehensive analysis of 2012 casualty statistics will be published later this year.

The key findings include:

- **The number of people killed** in road accidents reported to the police decreased to 1,754 in 2012 from 1,901 in 2011 (a fall of 8 per cent). This is the lowest figure since national records began in 1926.

- **The number of people seriously injured** decreased by 0.4 per cent to 23,039 in 2012 from 23,122 in 2011. This figure is 15 per cent lower than the 2005-09 average.

- **The total number of casualties** in road accidents reported to the police in 2012 was 195,723, down 4 per cent from the 2011 total. The total number of people seriously injured has fallen by 15 per cent from the 2005-09 average.

- **Total reported child casualties** (ages 0-15) fell by 11 per cent to 17,251 in 2012. The number of children killed or seriously injured also fell, decreasing by 6 per cent to 2,272 in 2012 from 2,412 in 2011.

- A total of 145,571 personal-injury **road accidents** were reported to the police in 2012, 4 per cent lower than in 2011.

- **Vehicle traffic levels** have remained broadly stable for the second year running, though there was a small fall of 0.4 per cent between 2011 and 2012.
1. Overall results

- The number of **people killed** in road accidents reported to the police decreased to 1,754 in 2012 from 1,901 in 2011. This means that there were 147 fewer deaths in 2012 in comparison with the previous year, a fall of 8 per cent. This is the lowest number of people killed in road accidents on record and an apparent return to the downward trend that ran from 2003 to 2010.

- The number of people **seriously injured** decreased by 0.4 per cent to 23,039 in 2012 from 23,122 in 2011. The overall number of casualties in road accidents reported to the police in 2012 was 195,723, down 4 per cent from the 2011 total. The total number of people seriously injured has fallen by 15 per cent from the 2005-09 average.

- A total of 145,571 personal-injury **road accidents** were reported to the police in 2012, 4 per cent lower than in 2011. This total is the fewest reported accidents in a single year apart from 1926 and 1927, the first two years national records were kept. This is in the context of a 0.4 per cent decrease in traffic between 2011 and 2012.

**Traffic and reported casualties by severity, Great Britain: 2000 to 2012 (indexed to 2005-09 average)**

Source: STATS19 RAS30001, TRA0101

The effect of weather patterns on road accidents and casualties in 2012

- Although there were no extreme or unusual deviations from the long term average temperature in the UK in 2012, it was the second wettest year on record, behind 2000. Eight of the last nine months of the year had considerably more rainfall than the 1981-2010 long term average. In particular, there were sustained periods of heavy rainfall during late spring and early summer in the UK. Rainfall in April was 79 per cent higher than the April long term average. More than double the average June rainfall fell in June 2012. The equivalent figure for July was 53 per cent higher than the long term average for that month. The second quarter of 2012 (April to June) was the wettest second quarter since Met Office records began in 1910.

- The likely result of this additional rainfall in 2012 would have been to reduce the number of pedestrians, pedal cyclists and motorcyclists on Britain’s roads, especially during the spring and summer months. A reduction in exposure in this way may have had the effect of reducing the
number of accidents and casualties from these user groups. Other road users, such as car occupants, are less likely to have been affected by the heavy rainfall.

a) Distribution of average distance travelled by quarter for pedestrians, pedal cyclists and motorcycle users, GB: average for 2002 to 2010 (Source: National Travel Survey)

b) Change in number of killed and seriously injured casualties from 2011 to 2012 for pedestrians, pedal cyclists and motorcycle users in Great Britain (Source: STATS19)

c) Difference between 2012 rainfall and the long term average rainfall (for 1981-2010) by quarter, UK (Source: Met Office)

The charts above show the relationship between a) how far vulnerable road users (pedestrians, pedal cyclists and motorcyclists) travel in each quarter of a typical year, b) the change in vulnerable road user casualties between 2011 and 2012, and c) rainfall in 2012.
• The top chart (a) above shows that in a typical year, pedal cycling and motorcycling tend to happen more during the spring and summer months (April to September). However, the bottom chart (c) shows that there was significantly more rainfall during quarter 2 (April to June) 2012 than the long term average for that period. The middle chart (b) highlights that quarter 2 also had marked year-on-year falls in the number of people killed or seriously injured for each of the three vulnerable road user groups. With the exception of pedestrians and motorcycle users in quarter 4, all other comparisons showed year-on-year increases, especially during the very dry first quarter.

• Therefore it is reasonable to assume that the unusually heavy rainfall suppressed the number of vulnerable users on the roads and footways, particularly at a time when they could have been expected to be most active. This may have lead to a lower number of casualties than might have been expected during that period.

• We are carrying out more detailed research looking at the relationship between extreme weather events (such sustained periods of snow, rain or sub-zero temperatures) and casualties and hope to publish the results in the Annual Report later this year.

2. Casualties by road user type

• The number of car occupant fatalities in 2012 decreased to 801, down 9 per cent compared with 2011. The number of seriously injured car occupants in accidents reported to the police fell by 1 per cent to 8,232. Total reported casualties among car users were 119,708, 4 per cent fewer than 2011. Car and taxi traffic slightly decreased by 0.2 per cent over the same period.

• There were 420 pedestrian deaths, 7 per cent fewer than in 2011. However, the number of seriously injured pedestrians increased by 2 per cent to 5,559. There were a total of 25,218 reported pedestrian casualties in 2012, down 4 cent in comparison with 2011.

• The number of pedal cyclists killed rose by 10 per cent from 107 in 2011 to 118 in 2012. In addition, the number of pedal cyclists reported to the police as seriously injured in a road
accident increased by 4 per cent to 3,222. There is a well-established upward trend in pedal cyclist casualties; this is eighth year that the number of seriously injured cyclist casualties has increased.

- The number of **motorcycle users** killed fell by 9 per cent from 362 in 2011 to 328 in 2012. The number of users reported as seriously injured decreased by 5 per cent to 5,000. Total reported motorcycle user casualties decreased by 4 per cent to 19,310 in 2012. Motorcycle traffic decreased by 2 per cent over the same period.

- As discussed in the previous section, it is possible that the sustained rainfall in quarter 2 may have resulted in fewer vulnerable road user casualties than might have been expected in the absence of the unusually wet summer weather.

Number of fatalities for vulnerable road users, Great Britain: 2000 to 2012 (indexed to 2005-09 average)  
**Source:** STATS19 RAS30001

- A total of 61 **children** (aged 15 or less) were killed in reported road traffic accidents in 2012, compared with 60 children in 2011. However, the number of children seriously injured fell by 6 per cent to 2,211 in 2012. The total number of child casualties fell by 11 per cent between the two years leading to the lowest total since detailed records started in 1979.

### 3. Casualties and accidents by road type

- The greatest number of reported accidents in 2012 occurred on **built-up roads** (roads with speed limits of or under 40 mph). In total, there were 109,036 accidents on built-up roads in 2012, 4 per cent lower than in 2011. These accidents resulted in 139,899 casualties, 777 of which were fatalities and 15,610 were seriously injured. The number of fatalities on built-up roads in 2012 was 5 per cent lower than in 2011 although the number of casualties who were seriously injured increased by 1 per cent.

- The number of reported accidents on **non built-up roads** (roads with speed limits over 40 mph) also decreased by 4 per cent from 32,269 in 2011 to 30,920 in 2012. The number of people killed on these roads decreased by 9 per cent from 979 in 2011 to 889 in 2012. The number of seriously injured casualties decreased by 3 per cent to 6,775 in 2012.
Casualties on motorways decreased for all severities (killed, seriously injured, slightly injured were down 17, 12 and 5 per cent respectively) against a decrease of 0.4 per cent in traffic. In total 5,615 accidents on motorways were reported to the police in 2012, 4 per cent fewer than in 2011.

4. Changes in comparison with 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 is used as a baseline for the Outcomes Framework for the Strategic Framework for Road Safety.

The number of people killed or seriously injured (KSI) in road accidents reported to the police in 2012 was 17 per cent lower than the 2005-09 average. For fatalities alone, the 2012 figure was 38 per cent lower than in the 2005-09 base period.

Reported road casualties by severity, Great Britain, comparison of 2012 with 2005-09 average and 2011

<table>
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<tr>
<th></th>
<th>2005-09 average</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>% change over 2005-09 average</th>
<th>% change from 2011</th>
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</thead>
<tbody>
<tr>
<td>All road users</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Killed</td>
<td>2,816</td>
<td>2,538</td>
<td>2,222</td>
<td>1,850</td>
<td>1,901</td>
<td>1,754</td>
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<td>-8</td>
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<td>Killed or seriously injured</td>
<td>30,041</td>
<td>28,572</td>
<td>26,912</td>
<td>24,510</td>
<td>25,023</td>
<td>24,793</td>
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<tr>
<td>All casualties</td>
<td>246,050</td>
<td>230,905</td>
<td>222,146</td>
<td>208,648</td>
<td>203,950</td>
<td>195,723</td>
<td>-20</td>
<td>-4</td>
</tr>
</tbody>
</table>

Fatalities in reported road traffic accidents, Great Britain: 2000 to 2012 compared with the 2005-09 average

Reported child casualties (ages 0-15) in 2012 were 28 per cent lower than the 2005-09 base period average and the number of children killed or seriously injured was 26 per cent lower. For child fatalities alone, the 2012 figure was 52 per cent lower than in the 2005-09 base period average.

There were 145,571 reported road accidents in 2012, 19 per cent fewer than the 2005-09 average (180,831). Of these, 22,538 involved at least one death or serious injury, down 15 per cent on the 2005-09 average (26,473).

5. Differences between provisional quarterly data and final data

- The data released in the quarterly releases are provisional as the records used are incomplete at the time of publication. Some forces have no, or limited, data in some of the quarters, and some records change between the provisional publication and the final database.

- The results from each quarter changed slightly between the original release and table RAS30003. Overall, for the first three quarters of the year (provisional results for quarter 4 are not produced), there were four fewer deaths, 149 more KSI casualties (up by 0.8 per cent) and 268 fewer slightly injured casualties (down by 0.2 per cent) in the final data in comparison with the provisional results. These comparisons refer to the quarter 1 and quarter 2 data as they were first released. They were subsequently revised with the release of quarter 3 estimates and final revisions made in this release.

6. 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, as hospital, survey and compensation claims data all indicate a higher number of casualties than police accident data would suggest.

- Our current best estimate, derived primarily from National Travel Survey (NTS) data and produced in 2011, is that the total number of road casualties in Great Britain each year, including those not reported to police, is within the range 660 thousand to 800 thousand with a central estimate of 730 thousand. A discussion of how this estimate has been derived and its limitations, together with information on complementary sources of data on road accidents and casualties, are contained in the Survey data on road traffic accidents article of Reported Road Casualties Great Britain: 2010 Annual report, which can be found at: http://webarchive.nationalarchives.gov.uk/20120104201631/http://www.dft.gov.uk/statistics/releases/road-accidents-and-safety-annual-report-2010/.
The estimates of the total number of road casualties in Great Britain for 2011 and 2012 will be published in the 2012 Annual Report, scheduled for release in September 2013.

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. However, police data on road accidents (STATS19), whilst not perfect, remain the most detailed, complete and reliable single source of information on road casualties covering the whole of Great Britain, in particular for monitoring trends over time.

7. Background notes

1. The Reported Road Casualties Great Britain Main Results web page provides further detail of the key findings presented in this statistical release. The tables are available at: https://www.gov.uk/government/publications/reported-road-casualties-great-britain-main-results-2012


3. Further information on Reported Road Casualties Great Britain, including information about the variables collected on the STATS19 form, historical publications and factsheets, can be found at: https://www.gov.uk/transport-statistics-notes-and-guidance-road-accident-and-safety

4. More detailed tables and analysis of the 2012 statistics, including an updated set of outcome indicators for the Strategic Framework for Road Safety will be published in Reported Road Casualties Great Britain: Annual Report 2012 later this year.

5. Provisional quarterly road casualty statistics are published throughout the year. The next provisional estimates (for quarter 1 2013) are due to be published in August 2013. Quarterly statistical releases can be found at: https://www.gov.uk/government/organisations/department-for-transport/series/road-accidents-and-safety-statistics#publications.

6. 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 last completed 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 have been reassessed during 2013 and the report will be published in July 2013.

7. 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