

Reported Road Casualties in Great Britain: 2010 Annual Report

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RESPONSIBLE STATISTICIAN:
Pat Kilbey

FURTHER INFORMATION

Media Enquiries:

020 7944 6898

Public Enquiries:

020 7944 6595

Roadacc.stats@dft.gsi.gov.uk

Reported Road Casualties in Great Britain: 2010 Annual Report

The Reported Road Casualties in Great Britain (RRCGB) Annual Report: 2010 presents detailed statistics (headline figures were first published in June 2011) about the circumstances of personal injury accidents, including the types of vehicles involved, the resulting casualties and factors which may contribute to accidents. In addition to detailed tables there are six articles containing further analysis on specific road safety topics.

Most of the statistics in the report are based on information about accidents reported to the police. However, other sources such as mortality, survey and hospital data are also used as well as population and traffic data to provide a wider context.

The key findings from the RRCGB 2010 report include:

- In 2010, there were a total of 208,648 casualties of all severities in road accidents reported to the police, 6 per cent lower than in 2009. There were 1,850 people killed, 17 per cent lower than in 2009 and 22,660 were seriously injured, down 8 per cent. Motor vehicle traffic fell by 2 per cent over the same period.
- The number of fatalities fell for almost all types of road user, with a fall of 21 per cent for car occupants, 19 per cent for pedestrians, 15 per cent for motorcyclists. Pedal cycle fatalities rose by 7 per cent
- In 2010, it is estimated that 9,700 reported casualties (5 per cent of all road casualties) occurred when someone was driving whilst over the legal alcohol limit. The provisional number of people estimated to have been killed in drink drive accidents was 250 (14 per cent of all road fatalities).
- *Failed to look properly* was again the most frequently reported contributory factor and was reported in 40 per cent of all accidents reported to the police in 2010.
- Not all non-fatal accidents are reported to the police. Our best current estimate is that the total number of road casualties in Great Britain, including those not reported to police, is within the range 660 thousand to 800 thousand with a central estimate of 730 thousand.
- In 2010, the economic welfare cost of reported road accidents was estimated to be around £15 billion.



Reported Road Casualties Great Britain: 2010 Annual Report

Introduction

Reported Road Casualties in Great Britain Annual Report: 2010 presents detailed statistics about the circumstances of personal injury accidents, including the types of vehicles involved, the resulting casualties and factors which may contribute to accidents happening. Most of the statistics in the publication are based on information about accidents reported to the police (using 'STATS 19' forms). However, other sources such as mortality, survey and hospital data are also used as well as population and traffic data to provide a wider context.

In addition to detailed tables there are six articles containing further analysis on specific road safety topics.

- an overview and trends in reported road casualties
- valuation of road accidents and casualties
- drinking and driving
- contributory factors in accidents
- survey data on road traffic accidents, including an overall estimate of total casualties
- hospital admissions data on road casualties

This publication summarises key points from each article.

1. 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 2010 compared with recent years. It looks at trends by severity and for different road user groups. Initial figures for the Road Safety Strategic Framework outcome indicators are also included¹

Based on accidents reported to the police, in 2010:

- There were a total of 208,648 casualties of all severities in road accidents reported to the police, 6 per cent lower than in 2009. 1,850 people were killed, 17 per cent lower than in 2009, 22,660 were seriously injured (down 8 per cent) and 184,138 were slightly injured (down 6 per cent). Motor vehicle traffic fell by 2 per cent over the same period.

¹ <http://www.dft.gov.uk/publications/strategic-framework-for-road-safety>

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- The number of fatalities fell for almost all types of road user, with a fall of 21 per cent for car occupants, 19 per cent for pedestrians, 15 per cent for motorcyclists. Pedal cycle fatalities rose by 7 per cent.

Compared with the 1994-98 average, in 2010:

- The number killed was 48 per cent lower;
- The number of reported killed or seriously injured casualties was 49 per cent lower;
- The number of children killed or seriously injured was 64 per cent lower; and
- The slight casualty rate was 32 per cent lower.
- In contrast traffic rose by an estimated 13 per cent over this period.

The article "Overview and trends in reported road casualties " can be found at:

<http://assets.dft.gov.uk/statistics/releases/road-accidents-and-safety-annual-report-2010/rrcgb2010-01.pdf>

Related statistics (tables and charts) can be found at:

http://www.dft.gov.uk/statistics?orderby=date&post_type=table&series=road-accidents-and-safety-series

Tables RAS30059-RAS30068, RAS410001, RAS40006

2. Valuation of road accidents and casualties

This article provides the latest Department for Transport (DfT) estimates on the values for prevention of road accidents and casualties for use in the appraisal of transport schemes. In addition, the estimate of the total value of road accidents in Great Britain in 2010 is also included.

Since 1993, the valuation of both fatal and non-fatal casualties has been based on a consistent willingness to pay (WTP) approach. This approach encompasses all aspects of the valuation of casualties, including the human costs, which reflect pain, grief, suffering; the direct economic costs of lost output and the medical costs associated with road accident injuries.

- The total value of prevention of reported road accidents in 2010 was estimated to be £15 billion. Prevention can be interpreted in two ways here: on the one hand, it is the benefit which would be obtained by prevention of road accidents from a cost benefit view point. On the other hand, it can be considered as the loss to society due to the current level of road accidents. This includes an estimate of damage only accident costs but does not take account of under-reporting of accidents.
- A number of assumptions have been made to produce a broad illustrative figure which suggests that allowing for accidents not reported to the police could increase the total value of prevention of road accidents to around £32 billion as an upper limit.

The article "Valuation of road accidents " can be found at:

<http://assets.dft.gov.uk/statistics/releases/road-accidents-and-safety-annual-report-2010/rrcgb2010-02.pdf>

The related table RAS60001 can be found at:

<http://assets.dft.gov.uk/statistics/tables/ras60001.xls>

3. Drinking and Driving

Summary

This article presents statistics and an analysis of reported drinking and driving accidents and the casualties involved.

- It is estimated that in 2010, 9,700 reported casualties (5 per cent of all road casualties) occurred when someone was driving whilst over the legal alcohol limit.
- The provisional number of people estimated to have been killed in drink drive accidents was 250 in 2010 (14 per cent of all road fatalities), a decrease of 130 fatalities (35 per cent) compared to final 2009 estimates.
- The provisional number of KSI (killed or seriously injured) casualties in 2010 was 1,480, 21 per cent below final 2009 estimates.
- Provisional figures for the number of slight casualties in 2010 fell 19 per cent since 2009, from 10,150 to 8,220.

The article "Drinking and driving" can be found at:

<http://assets.dft.gov.uk/statistics/releases/road-accidents-and-safety-annual-report-2010/rrcgb2010-03.pdf>

Related statistics (tables and charts) can be found at:

http://www.dft.gov.uk/statistics?orderby=date&post_type=table&series=road-accidents-and-safety-series

Table numbers RAS51001-RAS51019.

4. Contributory factors to reported road accidents

Summary

This article describes the scope and limitations of the information on contributory factors collected as part of the national road accident reporting system (STATS19), and presents results from the sixth year of collection.

- *Failed to look properly* was again the most frequently reported contributory factor and was reported in 40 per cent of all accidents reported to the police in 2010. Four of the five most frequently reported contributory factors involved *driver or rider error or reaction*. For fatal accidents the most frequently reported contributory factor was *loss of control*, which was involved in 34 per cent of fatal accidents.
- *Pedestrian failed to look properly* was reported in 60 per cent of accidents in which a pedestrian was injured or killed, and *pedestrian careless, reckless or in a hurry* was reported in 25 per cent of accidents.
- *Exceeding the speed limit* was reported as a factor in 5 per cent of accidents, but these accidents involved 14 per cent of fatalities. At least one of *exceeding the speed limit* and *travelling too fast for the conditions* was reported in 12 per cent of all accidents and these accidents accounted for 24 per cent of all fatalities.

The contributory factors system has been developed to provide some insight into why and how road accidents occur. Contributory factors are designed to give the key actions and failures that led directly to the actual impact to aid investigation of how accidents might be prevented. The factors are largely subjective, reflecting the opinion of the reporting police officer, and are

not necessarily the result of extensive investigation. Some factors are less likely to be recorded since evidence may not be available after the event. While this information is valuable in helping to identify ways of improving safety, care should be taken in its interpretation.

The article "Contributory factors to reported road accidents" can be found at:
<http://assets.dft.gov.uk/statistics/releases/road-accidents-and-safety-annual-report-2010/rrcgb2010-04.pdf>
Related statistics (tables and charts) can be found at:
http://www.dft.gov.uk/statistics?orderby=date&post_type=table&series=road-accidents-and-safety-series
Table numbers RAS50001-RAS50011.

5. Survey data on road accidents

Summary

This article summarises data on road accidents from the National Travel Survey and a recent follow-up survey and briefly describes some of the issues relating to the use of this data to estimate the total number of road casualties in Great Britain, and presents broad brush estimates of total casualties (updating and revising those included in earlier reports). The National Travel Survey (NTS) has included questions asking people about their involvement in road accidents since 2007.

- Our best current estimate derived from the NTS data is that the total of number of road casualties in Great Britain annually, including those not reported to the police, is within the range 660 thousand to 800 thousand with a central estimate of 730 thousand. This is based on data for the seven year period 2004 to 2010.
- Results of the NTS follow-up study suggest around 10 per cent of accidents reported by the respondents are outside the scope of STATS19. Adjustments were made to exclude these casualties from the above figures.
- It has long been known that police data does not provide a complete record of all injury accidents and resulting casualties, as the estimates illustrate. This should be borne in mind when using and analysing STATS19 data. However, STATS19 remains the most detailed, complete and reliable single source of information on road casualties covering the whole of Great Britain.
- Our best current estimate derived from the NTS data is that the total annual number of road casualties in Great Britain, including those not reported to police, is within the range 660 thousand to 800 thousand with a central estimate of 730 thousand.

The article "Survey data on road accidents" can be found at:
<http://assets.dft.gov.uk/statistics/releases/road-accidents-and-safety-annual-report-2010/rrcgb2010-05.pdf>
Related statistics (tables and charts) can be found at:
http://www.dft.gov.uk/statistics?orderby=date&post_type=table&series=road-accidents-and-safety-series
Table numbers RAS54001-RAS54004.

6. Hospital admissions data on road casualties

Summary

This article describes road casualties admitted to hospital contained in Hospital Episode Statistics (HES), comparing it with serious injuries reported to the police in the STATS19 system. Information contained in HES which is unavailable from STATS19 is also explored.

- In 2010 there were around 36 thousand recorded emergency admissions to hospitals in England resulting from road traffic accidents, compared to 20 thousand serious injuries reported in STATS19. Although police and hospital data are not directly comparable, this illustrates the incompleteness of the police data for non-fatal casualties.
- Comparison of trends shown by police and hospital data is difficult, and there are known factors affecting patterns shown by the hospital data. However, with caution, HES can provide a useful secondary source of trend data, providing further evidence of a fall in casualties in recent years.
- Around two thirds of road casualties admitted to hospital and linked to the STATS19 data (linked STATS19 and HES data for 1999-2009) have minor or moderate injuries (MAIS 1 or 2). The majority (49 per cent) of these road casualties suffered from a fracture as a primary injury. The most commonly injured primary body regions include head and leg.
- Using the linked STATS19 and HES data, the proportion of car occupants with minor injuries was higher in the newest cars, suggesting less severe injuries for occupants of newer cars. For example the proportion of MAIS 1 injuries was 34 per cent for occupants of cars aged 1-4 years, and 29 per cent for occupants of cars aged 10 years or older.

The article "Hospital admissions data on road casualties" can be found at:

<http://assets.dft.gov.uk/statistics/releases/road-accidents-and-safety-annual-report-2010/rrcgb2010-06.pdf>

Related statistics (tables and charts) can be found at:

http://www.dft.gov.uk/statistics?orderby=date&post_type=table&series=road-accidents-and-safety-series

Table numbers RAS55001-RAS55015.

Reported Road Casualties in Great Britain 2010: detailed tables

The annual report also includes detailed tables based on data reported to the police, areas covered are listed below, with relevant table numbers in brackets:

- accidents (RAS10002-RAS10013)
- drivers and vehicles involved (RAS20001-RAS20010)
- casualties (RAS30009-RAS30037)
- combined accidents, casualties, vehicles (RAS40001-RAS40005)
- area comparisons (RAS30031-RAS10034)
- international comparisons (RAS52001)
- inter modal comparisons (RAS53001)
- background data, traffic, population etc. (RAS90001-RAS9002)

A full list of tables and an index linking 2009 RRCGB report table numbers with 2010 RRCGB web tables can be found here <http://assets.dft.gov.uk/statistics/releases/road-accidents-and-safety-annual-report-2010/rrcgb2010-index.xls>

Detailed tables can be found on Reported road casualties Great Britain – 2010 annual report web page at:
http://www.dft.gov.uk/statistics?orderby=date&post_type=table&series=road-accidents-and-safety-series

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, 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 can be found in the RRCGB annual report in article 5 of this year's report.

The police data are therefore not a complete record of all injury accidents and this should be borne in mind when using and analysing the data included in this publication. Police data on road accidents remain the most detailed, complete and reliable single source of information on road casualties covering the whole of Great Britain.

We also continue to look at other sources of data on road accidents. The RRCGB 2010 annual report contains an analysis of hospital data (article 6). Further information on complementary sources of data on road accidents and casualties, can be found in Reported Road Casualties Great Britain: 2008 and 2009 annual reports, which are available from:
<http://webarchive.nationalarchives.gov.uk/20110503151558/http://dft.gov.uk/pgr/statistics/datatablpublications/accidents/casualtiesgbar/>

Background notes

1. Further information about the Reported Road Casualties Great Britain Annual Report can be found at: <http://www.dft.gov.uk/statistics/releases/road-accidents-and-safety-annual-report-2010>
2. On 17 December 2010, the United Kingdom Statistics Authority designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007, signifying their compliance with the Code of Practice for Official Statistics.
Designation can be broadly interpreted to mean that the statistics:
 - meet identified user needs;
 - are well explained and readily accessible;
 - are produced according to sound methods, and
 - are managed impartially and objectively in the public interest.Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.
3. Details of ministers and officials who receive pre-release access to these statistics up to 24 hours before release can be found in the pre-release access list at: <http://assets.dft.gov.uk/statistics/series/road-accidents-and-safety/reported-road-casualties-gb-main-results-2010-prerelease.pdf>
4. Notes & Definitions used in STATS19, a copy of the form used to collect the data and instructions for completion can be found at: <http://www.dft.gov.uk/statistics/series/road-accidents-and-safety/>
5. Specific notes and definitions used in RRCGB 2010 can be found here: <http://assets.dft.gov.uk/statistics/releases/reported-road-casualties-gb-main-results-2010/reported-road-casualties-gb-main-results-2010-definitions.pdf>
6. More detailed statistics about personal injury road accidents reported to the police, the vehicles and casualties involved, than it is possible to make available in this publication can be found through Road Casualties Online (RCOL). The website allows users to perform their own analysis and download data to suit their needs. RCOL can be accessed from the road accidents and safety page at <http://www.dft.gov.uk/statistics/series/road-accidents-and-safety/>
7. Reported accident and casualty data are also released at record level (subject to meeting confidentiality requirements) as part of the government's transparency agenda. These records can be accessed through RCOL or on the DfT website <http://data.gov.uk/dataset/road-accidents-safety-data>
8. Information on implementation of the recent review changes to STATS 19 and CRASH, the new electronic police accident reporting system can be found through the road accidents and safety web page: <http://www.dft.gov.uk/statistics/series/road-accidents-and-safety/>
9. The next release of road accidents and casualty data will be a set of regional and local tables on 13 October 2011.

Key definitions

(a full list of definitions can be found at the link above)

Accident: Involves 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. Damage-only accidents, with no human casualties or accidents on private roads or car parks are not included. 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.

Casualty: A person killed or injured in an accident. Casualties are sub-divided into killed, seriously injured and slightly injured

Fatal accident: An accident in which at least one person is killed; other casualties (if any) may have serious or slightly injuries.

Killed: Human casualties who sustained injuries which caused death less than 30 days (before 1954, about two months) after the accident. Confirmed suicides are excluded.

Serious accident: One in which at least one person is seriously injured but no person (other than a confirmed suicide) is killed.

Serious injury: An injury for which a person is detained in hospital as an "in-patient", or any of the following injuries whether or not they are detained in hospital: fractures, concussion, internal injuries, crushings, burns (excluding friction burns), severe cuts, severe general shock requiring medical treatment and injuries causing death 30 or more days after the accident. An injured casualty is recorded as seriously or slightly injured by the police on the basis of information available within a short time of the accident. This generally will not reflect the results of a medical examination, but may be influenced according to whether the casualty is hospitalised or not. Hospitalisation procedures will vary regionally.

Slight accident: One in which at least one person is slightly injured but no person is killed or seriously injured.

Slight injury: An injury of a minor character such as a sprain (including neck whiplash injury), bruise or cut which are not judged to be severe, or slight shock requiring roadside attention. This definition includes injuries not requiring medical treatment.