# Reported Road Casualties in Great Britain: notes, definitions, symbols and conventions

#### **Notes**

The statistics refer to personal injury accidents on public roads (including footways) which become known to the police within 30 days. In particular, 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. Some 50 data items are collected for each accident, including the time and location of the accident, the types of vehicles involved and what they were doing at the time of the accident, and some information on the drivers and casualties involved. The data are processed and then passed by the police (or their agent) to the Department for final checking and analysis.

The form (STATS19) used to collect the statistics and instructions (STATS20) which give more detail on the definitions used for completion) are published by the Department for Transport, the Scottish Government and the Welsh Assembly Government, on the DfT website at: <a href="https://www.gov.uk/transport-statistics-notes-and-guidance-road-accident-and-safety">https://www.gov.uk/transport-statistics-notes-and-guidance-road-accident-and-safety</a>.

As noted above, statistics on road safety in Great Britain are mostly based on accidents reported to the police via the STATS19 system. Comparisons with death registration statistics 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 are reported.

The Department produces an annual 'best estimate' of the total number of road casualties in Great Britain each year, including those not reported to police. This is derived primarily from National Travel Survey (NTS) data, which, from 2013 is based on an England only resident sample. The latest such estimates, along with a description of how the have been derived and their limitations, are set out in an annual article published in the in Reported Road Casualties Great Britain annual report.

The STATS19 data are therefore not a complete record of all injury accidents and this should be borne in mind when using and analysing the data. However, they 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.

## **Definitions**

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. One accident may give rise to several *casualties*. "Damage-only" accidents are not included in this publication.

Adults: Persons aged 16 years and over (except where otherwise stated).

Agricultural vehicles: Mainly comprises agricultural tractors (whether or not towing) but also includes mobile excavators and front dumpers.

Built-up roads: Accidents on "built-up roads" are those which occur on roads with speed limits (ignoring temporary limits) of 40 mph or less. "Non built-up roads" refer to speed limits over 40 mph. *Motorway accidents* are shown separately and are excluded from the totals for built-up and non built-up roads.

Buses and coaches: Buses or coaches equipped to carry 17 or more passengers, regardless of use.

*Cars:* Includes *taxis*, estate cars, three and four wheel cars and minibuses except where otherwise stated. Also includes motor caravans prior to 1999.

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

Children: Persons under 16 years of age (except where otherwise stated).

*Darkness:* From half an hour after sunset to half an hour before sunrise, i.e. "lighting-up time".

Daylight: All times other than darkness.

DfT: Department for Transport

*Drivers:* Persons in control of *vehicles* other than *pedal cycles, motorcycles* and ridden animals (see *riders*). Other occupants of *vehicles* are *passengers*.

Failed breath test: Drivers or riders who were tested with a positive result, or who failed or refused to provide a specimen of breath (see note on Table RAS51002 in "Notes to individual tables" for the coverage of breath test data).

Fatal accident: An accident in which at least one person is killed.

Goods vehicles: These are divided into two groups according to vehicle weight. They include tankers, tractor units without their semi-trailers, trailers, articulated vehicles and pick-up trucks.

Heavy goods vehicles (HGV): Goods vehicles over 3.5 tonnes maximum permissible gross vehicle weight (gvw).

*Light goods vehicles:* Goods vehicles, mainly vans (including car derived vans), not over 3.5 tonnes maximum permissible gross vehicle weight.

*Injury accident:* An *accident* involving human injury or death.

*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.

KSI: Killed or seriously injured.

Light Goods Vehicle: see Goods vehicles

*Motorcycles:* Two-wheel motor vehicles, including mopeds, motor scooters and motor cycle combinations.

Motorways: Motorway and A(M) roads.

*Mobility scooter:* A powered wheelchair or scooter with a maximum unladen weight of 150kg and a maximum speed of 8mph.

Other roads: All B, C and unclassified roads, unless otherwise noted (i.e. Table RAS30009).

Other vehicles: Other vehicles include ambulances, fire engines, trams, refuse vehicles, road rollers, agricultural vehicles, excavators, mobile cranes, mobility scooters and motorised wheelchairs etc, except where otherwise stated. Also included are non motorised vehicles include those drawn by an animal, ridden horse, wheelchairs without a motor, street barrows etc, except where otherwise stated. In certain tables "other vehicles" may also include buses and coaches and/or goods vehicles, as indicated in a footnote.

*Passengers:* Occupants of *vehicles*, other than the person in control (the *driver* or *rider*). Includes pillion passengers.

*Pedal cycles:* Includes tandems, tricycles and toy cycles ridden on the carriageway. From 1983 the definition includes a small number of cycles and tricycles with battery assistance with a maximum speed of 15 mph.

Pedal cyclists: Riders of pedal cycles, including any passengers.

*Pedestrians:* Includes children riding toy cycles on the footway, persons pushing bicycles, pushing or pulling other *vehicles* or operating pedestrian-controlled *vehicles*, those leading or herding animals, children in prams or buggies, and people who alight safely from *vehicles* and are subsequently injured.

*Riders:* Persons in control of *pedal cycles, motorcycles* or ridden animals. Other occupants of these *vehicles* are *passengers*.

Road users: Pedestrians and vehicle riders, drivers and passengers.

Rural Roads: Major roads and minor roads outside urban areas and having a population of less than 10 thousand.

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.

Severity: Of an accident; the severity of the most severely injured casualty (either fatal, serious or slight). Of a casualty; killed, seriously injured or slightly injured.

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.

Speed limits: Permanent speed limits applicable to the roadway.

*Taxi:* Any vehicle operating as a hackney carriage, <u>regardless of construction</u>, and bearing the appropriate district council or local authority hackney carriage plates. Also includes private hire cars.

Users of a vehicle: All occupants, i.e. driver (or rider) and passengers, including persons injured while boarding or alighting from the vehicle.

*Urban Roads:* Major and minor roads within an urban area with a population of 10 thousand or more. The definition is based on the 1991 Office of the Deputy Prime Minister definition of urban settlements. The urban areas used for this bulletin are based on 2001 census data.

*Vehicles:* Vehicles (except *taxis*) are classified according to their structural type and not according to their employment or category of licence at the time of an *accident*.

Vehicles involved in accidents: Vehicles whose drivers or passengers are injured, which hit and injure a pedestrian or another vehicle whose driver or passengers are injured, or which contributes to the accident. Vehicles which collide, after the initial accident which caused injury, are not included unless they aggravate the degree of injury or lead to further casualties. Includes pedal cycles ridden on the footway.

## Symbols and conventions used

Rounding of figures: In tables where figures have been rounded, there may be an apparent slight discrepancy between the sum of the constituent items and the total as shown.

Symbols: The following symbols have been used throughout:

0 = nil or negligible (less than half the final digit shown).

.. = not available/applicable.

Conversion factor: 1 mile = 1.6093 kilometres.

Billion = One thousand million = 1000,000,000 = 109

### Notes to individual tables

A list of the 2009 format table numbers can be found in the index sheet of all Road Safety Statistics tables

**RAS10004** – The total number of accidents is classified according to the number of each severity of injury resulting from them.

**RAS10006** – "Raining" includes drizzle, hail and sleet not tending to build up a deposit. "Snowing" includes sleet building up a deposit. "Fog" does not include light mist if it does not constitute a driving hazard on the road where the accident occurred.

**RAS10008** – Carriageway hazards are recorded as such, whether or not the animal or object concerned was hit and whether or not its presence is known to have contributed to the accident. "Other object in carriageway" comprises those not expected to be found in the carriageway; it does not include permanent features such as a bollard or pedestrian refuge. "Animal in carriageway" includes led animals, but not ridden horses which are recorded separately on the accident statistics report.

**RAS10009** – An accident is considered to be at a junction if it is within 20 metres of an intersection or roundabout. Grade separated crossings (by bridge or underpass) are not junctions. "Roundabout" includes mini-roundabout junctions, "T junction" includes slip roads joining dual carriageways. "Crossroads" includes only junctions where the alignments of both of the roads are uninterrupted, whatever the angle of the crossing, i.e. the arms are not staggered. If there is more than one junction within 20 metres of the accident, the nearest is coded.

**RAS10010** – This table only covers accidents where one vehicle is involved. It does not cover accidents involving two or more vehicles.

**RAS10011** – In column 6, "other combination" means that at least one of the vehicles involved is not a car.

**RAS20003** – This table shows the number of vehicles involved in fatal, serious, and slight accidents and data for other vehicles (i.e. taxis and minibuses) that usually come within the definition of a "car" in this publication.

**RAS20005** – Although pedal cycles are occasionally reported as having been involved in accidents on motorways, no attempt is made to estimate cycle traffic on motorways or to calculate corresponding rates. In other cells of the table, the rates are subject to uncertainty because of the small number of involvements (see RAS20004) and because the traffic estimates are based on a small number of counting points.

**RAS20007** – "Skidded" does not include vehicles which also jack-knifed. A vehicle which, as a result of the accident, was at any time on its roof, side, front or rear is recorded as having overturned, even though it may have come to rest on its wheels.

**RAS20008** – In all cases the manoeuvres are those being performed immediately before the accident. For definition of "at a junction" see note to RAS10009.

**RAS20010** – The journey purpose of around three quarters of drivers/riders of non-commercial vehicles is either classified as "other" or "unknown". These two categories cannot be separated although changes to the collection of data may make this possible

in the future. It is therefore likely that, for example, the number of work trips is underreported.

**RAS30013** – The casualty rates for each type of vehicle have been calculated by dividing the number of user casualties by the total amount of traffic estimated for the particular type of vehicle. For pedal cyclists, an additional rate has been provided, based on the National Travel Survey (NTS).

**RAS30017** – The table gives the number of casualties in accidents involving different types of vehicle. As a large proportion of accidents involve two or more vehicles, not necessarily of the same type, many casualties will be counted in two or more columns of this table. Pedestrian casualties are included under each type of vehicle involved in the accident. For example (first row, under the heading "Car"), 260 road users were killed in accidents on built-up A roads in which a car was involved.

**RAS30018** – The casualty rates, for a particular type of vehicle, have been calculated by dividing the number of user or pedestrian casualties by the total amount of traffic estimated for the particular type of vehicle on a particular class of road.

**RAS30019** – This table shows the number of casualties in fatal, serious, and slight accidents for each of the road user types listed and these are further split by drivers or riders and passengers.

**RAS30020** – Casualty rates are calculated by dividing the number of casualties of each road user type by the total number of vehicle miles or kilometres travelled by that vehicle type each month. In calculating rates, no allowance has been made for the number of persons per vehicle, which may vary from month to month.

The table shows separate monthly casualties in respect of motorcycles and passenger car users as distinct from the remainder of the "car" category. Monthly rates are only possible for the groups shown.

RAS30027 – A "zebra" crossing has broad black and white stripes on the road and orange flashing beacons. A "pelican" or "puffin" crossing has lights controlling the traffic including a flashing amber phase, and lights controlling pedestrians (or pedestrians and cyclist/horse riders) including a flashing "green man" phase. This category also includes any crossing with traffic lights which is not a pelican/puffin/toucan crossing but which has an indicator light for pedestrians only. "Light controlled junction (with pedestrian phase)" is any crossing with traffic lights at a junction, with a "green man phase" or other indicator light for pedestrians, this does not include normal traffic signals with pedestrian stud crossing points but no special indicator lights for pedestrians. Crossings with "human control" are those controlled by school crossing ("lollipop") patrols and other authorised persons (police, traffic wardens).

**RAS30030** – This table reports the number of child casualties which occur during term time (based on local authority term dates) and in the hours in which children may be expected to be making a journey to of from school, although the actual reason for the journey cannot be certain.

**RAS30035** – This table compares the number of registered road deaths (as published by the Registrars General) with all accidental deaths and with deaths from all causes (both of which include registered road deaths). Road deaths published by the Registrars General are based on the date of death as opposed to the date of death registration.

They differ from the STATS19 figures that are restricted to deaths within 30 days of an accident. Year to year fluctuations occur due to time lags between accident and death and registration of death.

**RAS30037** – See note to RAS20010

**RAS40001** – The completeness of reporting for slight injuries may vary over such a long time period. The reporting rate is especially influenced by public attitudes about reporting to the police, and the police awareness of the requirement to collect a defined long range of slight injury accidents.

**RAS40002** – The casualties in columns 3 to 6 are those resulting from the accidents in column 1. They are classified by severity of injury suffered by the casualty (columns) and by the severity of accident, i.e. of the most severely injured casualty in the accident (rows).

**RAS40003** – Provides for each speed limit in common use, the number of accidents and casualties on major roads - motorways (including A(M) roads) and A roads - and on minor roads. An accident on a road with any other limit is included with those of the next higher limit.

**RAS40004** – Columns 1 and 2 give, for each vehicle type, the number of accidents in which only one such vehicle was involved, showing the user casualties and any pedestrian casualties involved; e.g, in the All Areas table, 773 accidents involved only a pedal cycle, giving rise to 776 cyclist casualties (riders and passengers); a further 434 accidents also involved 442 pedestrian casualties as well as 128 cyclist casualties.

Columns 3 to 10 analyse two-vehicle accidents according to both vehicle types, also giving, by severity of injury, the casualties for the users of the vehicle class defined on the left (under vehicle A) and pedestrians who were (first) hit by vehicles of that class. Thus 15,458 accidents involved a pedal cycle and a car, resulting in 15,408 pedal cyclist casualties and 16 pedestrian casualties hit by the pedal cycle. The car user casualties and pedestrians hit by cars, in these same accidents, appear in the fourth group of column 3. Where both vehicles are of the same class, the casualties refer to those deriving from both vehicles, e.g. 39,501 accidents involved two cars with 59,933 car occupant casualties, with 765 pedestrians hit by one or other car.

Column 11 shows the total number of two vehicle accidents for the vehicle class defined on the left (under vehicle A).

Column 12 includes all accidents involving 3 or more vehicles, at least one of which is of the class on the left (under vehicle A), together with casualties associated with that class in such accidents; e.g. 589 such accidents involved at least one pedal cycle, with 662 cyclist casualties but with no pedestrians involved. Other casualties in these accidents would appear against the other vehicle classes concerned.

Column 13 is the sum of columns 1, 2, 11, and 12. In multi-vehicle accidents, the accidents (but not casualties) are multi-counted; e.g. the total number of accidents involving goods vehicles is the sum of involving 12,008 light goods vehicles (LGV) and 6,092 heavy goods vehicles (HGV) less the 266 accidents which involved both an HGV and a LGV and less any of the 3 or more vehicle accidents which involved at least one of each.

**RAS40005** – This table shows the number of vehicles involved in accidents and (where applicable) the number which were Left Hand Drive, the number of accidents involving these vehicles and casualties arising from these accidents.

RAS51002 – The figures relate to drivers (or riders) of cars, motor vehicles and motorcycles involved in accidents, whether or not the driver was a casualty. The first line gives the number of all such drivers of accident involved vehicles, including those who were not with their vehicles or not contacted by the police, as well as cases where injury or circumstances would have prevented a breath test. The second line gives the number required to take a breath test near the place of the accident, or at a hospital in the case of a casualty admitted there as a patient, provided the doctor in charge of the patient has not objected; it does not include breath tests at a police station following an arrest. The fourth line gives the number of positive tests, which indicated a breath alcohol concentration in excess of 35 micrograms per 100 millilitres of blood, plus the number of drivers required to provide a breath test who either refused or failed to provide a specimen of breath. No account is taken of whether or not a possible second breath test, or blood or urine test, confirmed the results, and whether or not a prosecution followed.

**RAS51003** and ras51004 – See note to RAS51002 for the coverage of breath test data. The small number of breath tests which have been recorded as carried out on pedal cyclists have been excluded.

**RAS52001** – Provisional 2013 fatality and fatality rates per million population have been included together with 2012 data. Population data used for 2013 are ONS 2011 census - based population estimates.

**RAS53001** – There have been a number of small changes due to revisions in road traffic and rail usage data to this table, but these have had little effect on the comparisons of the different modes.

For rail, the figures in this table have been sourced from the Rail Safety and Standards Board (RSSB). In versions of this table published in previous years they were based on casualties recorded by the Office of Rail Regulation (ORR) within a database called SIGNAL. Data from previous years have been revised to the RSSB figures to provide a consistent time series.

For Maritime, the latest table contains revisions to various years data between 2000 and 2006. For further details see the Annual Report by the Marine Accident Investigations Branch at <a href="https://www.maib.gov.uk">www.maib.gov.uk</a>.

For Pedestrians, exposure is calculated using trip data from the National Travel Survey (NTS) which, from 2013, is based on an England only resident sample. There is an apparent under-recording of short walks in 2002-2003 and in 2007- 2008 compared to other years. See section 1 of National Travel Survey 2008 Bulletin at: <a href="http://www.dft.gov.uk/pgr/statistics/datatablespublications/personal/mainresults/nts2008/">http://www.dft.gov.uk/pgr/statistics/datatablespublications/personal/mainresults/nts2008/</a> For 2011 data, 2010 NTS data is used together with projected 2011 population data.

Passenger casualty rates given in the table can be interpreted as the risk a traveller runs of being injured, per billion kilometres travelled. The coverage varies for each mode of travel and the definitions of injuries and accidents are different. Thus care should be exercised in drawing comparisons between the rates for different modes. Further information can be found in article 7 of RCGB 2007 (page 79).

http://webarchive.nationalarchives.gov.uk/20110503151558/http://dft.gov.uk/pgr/statistics/datatablespublications/accidents/casualtiesgbar/roadcasualtiesgreatbritain20071

The table provides information on passenger casualties and where possible travel by drivers and other crew in the course of their work has been excluded. Exceptions are for private journeys and those in company owned cars and vans where drivers are included. Figures for all modes of transport exclude confirmed suicides and deaths through natural causes. Figures for air, rail and water exclude trespassers and rail excludes attempted suicides. Accidents occurring in airports, seaports and railway stations that do not directly involve the mode of transport concerned are also excluded; for example, injuries sustained on escalators or falling over packages on platforms.

The following definitions are used:

Air: Accidents involving UK registered airline aircraft in UK and foreign airspace. Fixed wing and rotary wing aircraft are included but air taxis are excluded. Accidents cover UK airline aircraft around the world not just in the UK.

Rail: Train accidents and movement accidents involving people on board trains or in the act of boarding or alighting from them in Great Britain. These figures only cover National Rail, and do not cover accidents on Eurotunnel, London Underground, trams, other rail guided systems and trolley vehicle systems.

Water: Figures for travel by water include both domestic and international passenger carrying services of UK registered merchant vessels.

Road: Figures refer to Great Britain and include accidents 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. Figures include both public and private transport. More information and analyses on road accidents and casualties can be found in Part 4: Road traffic, freight, accidents and motor vehicle offences.

Bus or coach: Figures for work buses are included.

Car: Includes taxis, invalid tricycles, three and four wheel cars and minibuses. Prior to 1999 motor caravans were also included.

Van: Vans mainly include vehicles of the van type constructed on a car chassis. These are defined as those vehicles not over 3.5 tonnes maximum permissible gross vehicle weight.

Motorcycles: Mopeds, motor scooters and two-wheeled motor vehicles (including motor cycle combinations).

Pedal cycle: Includes tandems, tricycles and toy cycles ridden on the carriageway.

Pedestrian: Includes persons riding toy cycles on the footway, persons pushing bicycles, pushing or pulling other vehicles or operating pedestrian controlled vehicles, those leading or herding animals, occupants of prams or wheelchairs, and people who alight safely from vehicles and are subsequently injured.