





ROAD SAFETY ANNUAL REPORT 2018



UNITED KINGDOM

In 2016, 1 860 persons lost their lives in road crashes in the United Kingdom. Preliminary data for 2017 indicate a similar result with 1 856 fatalities. Overall, the number of road deaths has considerably declined in the past two decades; however, since 2010 the rate of decline has slowed. Currently, the United Kingdom does not have a national road safety strategy, but the government has published a Road Safety Statement, which guides road safety for the immediate future.

Trends

The United Kingdom registered an overall **increase in the number of road deaths in 2016**. In 2016, 1860 persons lost their lives in traffic crashes in the United Kingdom. This represents a 3.1% increase on 2015. In 2017 the number of road deaths remained stable at 1 856.

The **longer-term trend for road deaths** in the United Kingdom has been downward. Between 1990 and

Country Profile

Population in 2016: 66.6 million GDP per capita in 2016: USD 39 825 Cost of road crashes: 1.7% of GDP (2017) Road network: 422 638 kilometres (urban roads 34%; rural roads 65%; motorways 1%) Registered motor vehicles in 2016: 38.4 million (cars 83%; good vehicles 12%, motorcycles 3%) Speed limits: 30 mph on urban roads; 60-70 mph on rural roads; 70 mph on motorways Limits on Blood Alcohol Content: 0.8 q/l

2016, the number of annual road fatalities fell by 66%. Over the more recent past, the trend in the decline of traffic fatalities has slowed. The number of road casualties only fell by 2.4% in the 2010-16 period.

The number of **traffic deaths per 100 000 inhabitants** in the United Kingdom fell by 70% between 1990 and 2016. In 2016, 2.8 traffic deaths per 100 000 inhabitants were recorded, compared to 9.4 in 1990. The United Kingdom is one of the safest countries in the world on the roads and has the fourth lowest mortality rate among the 32 IRTAD countries with validated data.

The fatality risk, measured as **traffic deaths per billion vehicle-kilometres** (vkm) driven, stood at 3.4 in 2016 in Great Britain. When measured by the number of **road fatalities per 10 000 registered vehicles,** the fatality rate in 2016 stood at 0.5; i.e. four times less than in 1990.



Figure 1. Road safety, vehicle stock, traffic and GDP trends Index 1990 = 100

The picture for **fatalities by road user group** shows an improvement for motorcyclists but higher casualties among all other road users. In 2016, the number of motorcyclists killed decreased by 12.5% compared to 2015. It increased for car occupants (+7.1%), pedestrians (+8.4%) and cyclists (+5.0%).

In 2016, car occupants accounted for the largest share of road deaths with 42% of the total. They were followed by pedestrians (25%), motorcyclists (17%) and cyclists (6%). This distribution has barely changed since 2000.

The long-term trend shows that traffic in the United Kingdom has become safer for all road user groups. The strongest decline between 1990 and 2016 was registered among moped riders (-78%) and pedestrians (-74%). The decline was the slowest for motorcyclists (-50%). Since 2010, motorcyclists have benefited the most from road safety improvements with a reduction of 21% in the number of fatalities. The number of cyclists killed decreased by 5%; there was nearly no change for car occupants, and the number of pedestrians killed increased by 12%.



Figure 2. Road fatalities by road user group in percentage of total, 2016

Road deaths by age group in 2016 showed a marked increase in the number of casualties among the younger population. The number of children (up to 14) killed in traffic increased by 23% compared to 2015, and the number of teenagers aged 15 to 17 by 21%. In 2016, improvements were only observed for young adults. The number of road deaths decreased by 17% for the 18-20 age group and by 4% for the 21-24 year-olds. It increased for the other age groups with an increase of 5% for the 25-64 year-old group and by 3% for those aged 65 and above.

Looking at the longer-term trend, since 2000, the reduction in fatalities has benefited all age groups, with the highest reduction for the youngest groups (0-14, 15-17 and 18-20). For the 18-20 year-olds fatalities decreased by 69%; for the 15-17 year-olds it decreased by 66% and for the 0-14 year-olds by 63%. The older population (over 65) have not benefited at the same rate as the average population from the improvement in road safety. Between 2000 and 2016 fatalities decreased by 48% for the general population but only by 33% for the 65+ age group.

In 2016, the age groups the most at risk were the 21-24 and the 18-20 year-olds with a mortality rate of respectively 5.0 and 4.3 road deaths per 100 000 population in the same age band.

Regarding young drivers, a recent report has reviewed a set of interventions aimed at increasing the safety of young and novice drivers. The findings are available at: <u>https://www.gov.uk/government/publications/review-of-interventions-to-increase-the-safety-of-young-and-novice-drivers</u>.



Figure 3. Road fatality rates by age group, 1990-2016 Deaths per 100 000 population in a given age group

Figure 4. Road fatality rate by age and road user group, 2016 Fatalities per 100 000 population



Analysis of **fatalities by road type** shows that in 2016 the increase in the number of road deaths concerned the whole road network with the exception of motorways. The number of road deaths increased by 6.1% on rural roads and by 1.1% on urban roads. It decreased by 13.5% on motorways.

In 2016, rural roads continued to be the most deadly roads in the United Kingdom, with a share of 61% of all crash deaths, this is considerably higher than the 44% of traffic on these roads. The higher average speeds on rural roads more frequently result in more serious injuries and deaths. Urban roads accounted for 34% of all road deaths. Traffic on urban roads usually travels at lower speeds; as a result, injuries from collisions involving

just cars, buses and goods vehicles tend to be less serious. Motorways only accounted for 5% of all road fatalities, although they carry around 21% of all traffic. This distribution has not changed since 2000.

Since 2000, the 48% reduction in road fatalities has been equally shared among the three types of roads.



Figure 5. Road fatalities by road type

Fatality data are essential to understand road safety issues, but hardly sufficient. Information on **serious injuries from crashes** is also critically important. In 2016, there were 24 101 seriously injured casualties in reported road crashes. This figure is not comparable to 2015, due to severity reporting changes.

Economic costs of road crashes

The estimated total value of prevention of unreported accidents is around GBP 20 billion a year, higher than the value of reported injury accidents. This raises the total estimate for all reported and unreported accidents to around GBP 35.3 billion a year, corresponding to 1.7% of GDP.

	Unit cost [GBP]	Total [GBP]
Fatalities	2.13 million	3.6 billion
Severe injuries	0.24 million	5.5 billion
Slight injuries	0.25 million	2.7 billion
Property damage costs	0.02 million	4.5 billion
Non-fatal crashes not reported to police		19 billion
Total		35.3 billion
Total as % of GDP		1.7%

Table 1.	Costs	of	road	crashes,	2017
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Behaviour

The behaviour of road users is an important determinant of a country's road safety performance. **Inappropriate speed** in particular is one of the main causes of road crashes. In the United Kingdom, 15% of all road fatalities in 2015 were caused by excessive speed. Exceeding the speed limit was reported as a contributory factor in 5% of all crashes in Great Britain in 2016.

The table below summarises the main speed limits in the United Kingdom.

	General speed limit
Urban roads	30 mph
Rural roads	Single carriageway: 60 mph Dual carriageway: 70 mph
Motorways	70 mph

Table 2. Passenger car speed limits by road type, 2018

Driving under the influence of alcohol is another cause of road crashes in the United Kingdom, as in most IRTAD countries. Between 220 and 250 people were killed in accidents in Great Britain where at least one driver was over the drink drive limit in 2016, with a central estimate of 230 deaths. Although the central estimate for 2016 is lower than the final figure for 2015, the difference is not statistically significant and continues a period of stability recorded since 2010.

In a survey on drink driving in England and Wales undertaken in 2015-16, around 8% of drivers said that they had driven at least once or twice within the previous 12 months when they thought they were over the legal alcohol limit (DfT, 2016). This proportion has remained broadly unchanged since 2012-13.

In England, Wales and Northern Ireland the maximum authorised blood alcohol content (BAC) is 0.8 g/l. In Scotland, the maximum limit was reduced to 0.5 g/l in December 2014.

For statistical purposes, a drink drive accident is defined as an incident on a public road in which someone is killed or injured and where at least one of the motor vehicle drivers or riders involved met one of the following criteria: refused to give a breath test specimen when requested by police (other than when incapable of doing so for medical reasons; failed a roadside breath test by registering over 35 micrograms of alcohol per 100 millilitres of breath in England and Wales (or 22 micrograms of alcohol per 100 millilitres of breath in Scotland); died and was subsequently found to have more than the authorised BAC.

Drugs and driving is a worrying concern in the United Kingdom, but there is no data on the role of drug use by road users for reported road crashes. In 2016-17 in England and Wales, 0.4% of drivers said they had driven under the influence of illegal drugs at least

once in the previous year. This is not significantly different from earlier years. Both drink and drug driving are more prevalent amongst males and younger drivers. More detailed results on self-reported drink and drug driving are published at <u>https://www.gov.uk/government/statistical-data-sets/ras51-reported-drinking-and-driving</u>.

The United Kingdom introduced new legislation on 2 March 2015 on driving with a specified controlled drug in the body above a specified limit. The previous legislation required the police to demonstrate that driving was impaired by drugs in order to prosecute. An evaluation of this new drug driving legislation was conducted in 2017 and the conclusions are available at: <u>https://www.gov.uk/government/publications/drug-driving-law-evaluation</u>.

An increasing problem for traffic safety in the United Kingdom is **distraction**, for instance through the use of mobile phones while driving or crossing a street. An observational survey held in 2014 (DfT 2015a) in England and Scotland showed the proportion of drivers using hand-held mobile phones while driving was 1.6% overall: 1.4% for car drivers, 2.7% for van drivers, and 1.2% for truck drivers. A follow-up survey is currently underway.

In the United Kingdom, it is not permitted to drive while using a hand held device, while hands free devices are tolerated. In March 2017 new penalties were introduced. Motorists using a phone while driving now receive 6 points on their licence and a GBP 200 fine – up from the previous 3 points and GBP 100 penalty. Motorists caught using their mobile phones twice or accruing 12 points on their licence will face magistrates' court, being disqualified with fines of up to GPB 1 000. New drivers, within 2 years of passing their test, risk having their licence revoked and lorry or bus drivers can be suspended if caught.

The share of **sleepiness and fatigue** as a causal factor in crashes is especially challenging to detect. In Great Britain "fatigue" was assigned as a contributory factor in 2% of all reported accidents and 4% of fatal injury crashes in 2016.

Seat-belt wearing has been compulsory in the United Kingdom since 1983 in front seats and from 1991 for rear seats. Seat belt wearing regulations for children in rear seats came into force in 1989. Children are required to be restrained by a suitable combination of car seats and belts, depending on age. The most recent survey of seat belt use, carried out in 2014, provided estimates that 98% of car drivers, 96% of front-seat passengers and 87% of rear-seat car occupants in England wore seat belts (DfT, 2015a). These rates are slightly higher than earlier in the decade. The level of children in restraints in the rear seat of cars fell from 96% in 2009 to 91% in 2014. The Department for Transport (DfT) is currently repeating this survey.

	2009	2014
Front seats		
Driver	95	98
Front seat passenger	95	96
Rear seats		
General	89	87
Children (aged less than 14)	86	81
Adults (aged 14 and over)	79	81

Table 3. Seat belt wearing rate by car occupancy and road type (England) Percentages

For motorcyclists, **helmet wearing** is the most effective passive safety habit. In the United Kingdom, helmets have been compulsory on motorcycles since 1973 and on mopeds (up to 50 cc, maximum speed 45 km/h) since 1977.

A helmet is not compulsory on bicycles.

Road safety management and strategies

There are **several factors of influence on the United Kingdom's road safety performance** as captured by the above indicators. Road fatalities reached a peak in 1941 of just over 9 000 in Great Britain. Since then it has decreased by more than 80%. Various factors may have contributed to the recent large reductions in fatalities in addition to the longer-term trends in improved vehicle safety, road engineering, trauma care and education. The recession and economic downturn led to falling traffic levels and the continued reduction in average speeds will have played a significant part. Similarly, large falls in fatalities were seen during the recession in the early 1990s. Over more recent years, though, traffic levels have risen again, now exceeding the pre-recession levels. This might be one key reason why casualty levels have, at best, plateaued and might start to increase again. A statistical weather model for Great Britain has been used to assess the impact of weather on the number of road casualties reported in 2015. The model indicates that for most months of the year the weather had little net effect, so the weather adjusted figures for 2015 differ little from the actual reported figures. In 2016, it is estimated that the warmer and dryer weather may have led to 20 more deaths.

Responsibility for the organisation of road safety in the United Kingdom lies with the Department for Transport (DfT). The DfT sets the overall road safety strategy for Great Britain. This includes decisions about road safety targets and legislating on key safety issues. Transport Scotland has certain powers respecting road safety in Scotland, for example, it can vary the drink driving limit; and the Welsh Assembly has set a Welsh road safety target. Local highway authorities are responsible for safety on their roads and can use engineering measures as well as local education campaigns to improve safety. Road safety in Northern Ireland is the responsibility of the Department of the Environment in Northern Ireland. The Department published a Road Safety Statement in December 2015. It provides a road safety strategy for the immediate future. The strategy sets out the context of road safety in Britain today and the overarching scope of road safety activity for the government. It will be followed by consultations on specific issues as options are developed. The statement covers road safety policy within Britain as governed by the DfT. The governments and administrations of Scotland, Wales and Northern Ireland will seek to produce their own policies and strategic documents on devolved matters.

The key priorities for road safety include:

- Adopting the Safe System approach. This is clear in the framework set with Highways England and which it is now implementing. It is also a theme that runs throughout this statement.
- Protecting vulnerable road users, including pedestrians, cyclists, motor cyclists and horse riders, through infrastructure and vehicle improvements, promotion of safer behaviour and equipment and ensuring other road users are aware of the risks posed to these groups and adapt accordingly.
- Taking tough action against those who speed, exceed the drink-driving limit, range of real life driving conditions and situations.
- Working with the insurance industry to incentivise safer behaviour and to reward the uptake of new technologies and opportunities to improve skills that are proven to reduce collisions.
- Helping employers to reduce road related collisions at work, including through improved heavy goods vehicle (HGV) safety.
- Encouraging the faster uptake of safer vehicles via the promotion of clear consumer information and the procurement of safer vehicles.
- Promoting the development and adoption of connected and autonomous vehicle technologies in a way that maximises safety benefits.
- Continuing the THINK! campaign to provide road user education and influence behaviour in a targeted and engaging way.
- Enabling the police to use modern enforcement technologies, while protecting the privacy of law-abiding people.
- Supporting Highways England and local authorities in improving the safety standards of UK roads.
- Reviewing the nation's road safety management capacity, to identify opportunities for strengthening joint working, local innovation and efficiency.

- Supporting further devolution of road safety policy, in a way that meets the needs of the nation as a whole.
- Underpinning policy decisions with robust evidence, research and evaluation.
- Working in partnership with public and private sector bodies and civil society organisations to save lives.

In June 2018, the Department of Transport published a progress report on the delivery of the planned actions from the 2015 Road Safety Statement (DfT, 2018). Fifteen of the 23 short-term actions have been delivered including three where the original objectives have been exceeded:

- police activity against drug driving
- investment to local highways authorities
- campaigns on mobile phone use while driving

The government has a manifesto commitment to reduce the number of cyclists and other road users killed or seriously injured on the roads every year. However, there is **no specific target** associated with this commitment.

Measures

Several measures to improve road safety management have recently been put into place:

Road safety management

The Department's Cycling and Walking Investment Strategy was published in April 2017 and an Implementation Action Plan has now been developed.

Driving licence

New legislation came into force on 4 June 2018 allowing learners to drive on motorways when accompanied by an instructor in a dual control car. See more at https://www.gov.uk/government/consultations/allowing-learner-drivers-to-have-driving-lessons-on-motorways/allowing-learner-drivers-to-take-lessons-on-motorways

The driving test changed on 4 December 2017 to make it a better assessment of the ability to drive safely on the UK's busy, modern roads. It includes following directions from a navigation system and testing different manoeuvres. See more at: https://www.gov.uk/government/news/driving-test-changes-4-december-2017

Definitions, methodology, data collection

Road fatality: human casualties whose injuries resulted in death within 30 days of a road accident. Confirmed suicides are excluded.

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. Casualties are recorded as seriously or slightly injured by 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.

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.

There are three main sources of safety information in the United Kingdom:

- the national road accident reporting system, STATS19, which is based upon police reports
- information from coroners (in England and Wales) and procurators fiscal (in Scotland) on the levels of alcohol in the blood of people killed in road traffic accidents
- hospital episode statistics (HES).

Most of the data in this report, which is also included in the IRTAD database, come from STATS19. While all fatal crashes are reported by the police, data from hospitals, surveys and compensation claims indicate that a considerable proportion of non-fatal casualties are not known to the police. The best current estimate derived primarily from the National Travel Survey data and produced in 2017, is that the total number of road casualties in Great Britain each year, including those not reported to the police, is within the range of 590 000 to 760 000 with a central estimate of 670 000.

Linking HES data from hospitals and police data for England gives a better understanding of injury severity and outcomes. Around 47% of the police-reported seriously injured casualties for England alone are matched to the hospital records. As part of this linkage, the DfT has been working with the Maximum Abbreviated Injury Scale (MAIS) to rate the severity of injury crashes.

In 2016, police forces changed their reporting system for severe injuries and it is likely that the recording of serious injuries is more accurate for police forces using the new reporting systems. This has had a large impact on the number of serious injuries reported in 2016, which can therefore not be directly compared with previous years.

Resources

Recent research

Evaluation of new drug driving legislation: <u>https://www.gov.uk/government/publications/drug-driving-law-evaluation</u>

A review of interventions to increase the safety of young and novice drivers was recently published: <u>https://www.gov.uk/government/publications/review-of-interventions-to-increase-the-safety-of-young-and-novice-drivers</u>

Evaluation of fixed penalty notices for careless driving completed and published: <u>https://www.gov.uk/government/publications/evaluating-fixed-penalty-notices-for-</u> <u>careless-driving-offences</u>

Websites

UK Department for Transport – Road Safety policy: <u>https://www.gov.uk/transport/road-safety-driving-rules-and-penalties</u>

UK Department for Transport – Road Safety Statistics: <u>https://www.gov.uk/government/collections/road-accidents-and-safety-statistics</u>

UK Road safety observatory: key facts and summaries of research on road safety topics: <u>http://www.roadsafetyobservatory.com/</u>

Contact

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References

DfT (2018), Road Safety Statement: Progress Report. Moving Britain ahead, Department for Transport, London,

<u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachmen</u> <u>t_data/file/719259/road-safety-statement-progress-report.pdf</u>

DfT (2016), *Reported Road Casualties in Great Britain: 2015 Annual Report*, Department for Transport, London

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/568484/ rrcgb-2015.pdf

DfT (2015), Seat belt and mobile phone use surveys: England and Scotland 2014, Department for Transport, London, <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachmen</u> <u>t_data/file/406723/seatbelt-and-mobile-use-surveys-2014.pdf</u>

Road safety and traffic data

						2016 % change over				
	1990	2000	2010	2015	2016	2015	2010	2000	1990	2017
Reported safety data										
Fatalities	5 402	3 580	1 905	1 804	1 860	3.1%	-2.4%	-48.0%	-65.6%	1 856
Injury crashes	265 600	242 117	160 080	146 203	142 846	-2.3%	-10.8%	-41.0%	-46.2%	
Serious injuries (MAIS3+)		4 728	4 741	4 860						
Deaths per 100,000 population	9.4	6.1	3.0	2.8	2.8	0.9%	-7.9%	-54.0%	-70.4%	
Deaths per 10,000 registered vehicles	2.1	1.2	0.5	0.5	0.5	0.9%	-10.5%	-59.9%	-77.4%	
Deaths per billion vehicle kilometres	12.8	7.4	3.8	3.4						
Fatalities by road user										
Pedestrians	1 754	889	415	427	463	8.4%	11.6%	-47.9%	-73.6%	
Cyclists	267	131	111	100	105	5.0%	-5.4%	-19.8%	-60.7%	
Moped riders	37	15	10	8	8	0.0%	-20.0%	-46.7%	-78.4%	
Motorcyclists	634	597	403	361	316	-12.5%	-21.6%	-47.1%	-50.2%	
Passenger car occupants	2 462	1 784	867	802	859	7.1%	-0.9%	-51.8%	-65.1%	
Other road users	248	164	99	106	109	2.8%	10.1%	-33.5%	-56.0%	
Fatalities by age group										
0-14 years	394	171	42	52	64	23.1%	52.4%	-62.6%	-83.8%	
15-17 years	335	169	57	48	58	20.8%	1.8%	-65.7%	-82.7%	
18-20 years	558	342	197	127	105	-17.3%	-46.7%	-69.3%	-81.2%	
21-24 years	616	304	178	182	174	-4.4%	-2.2%	-42.8%	-71.8%	
25-64 years	2 223	1 908	1 046	951	1 002	5.4%	-4.2%	-47.5%	-54.9%	
65-74 years		272	128	162	146	-9.9%	14.1%	-46.3%		
≥ 75 years		407	257	282	311	10.3%	21.0%	-23.6%		
Fatalities by road type										
Urban roads	2 462	1 240	603	620	627	1.1%	4.0%	-49.4%	-74.5%	
Rural roads	2 706	2 149	1 184	1 073	1 137	6.0%	-4.0%	-47.1%	-58.0%	
Motorways	234	191	118	111	96	-13.5%	-18.6%	-49.7%	-59.0%	
Traffic data										
Registered vehicles (thousands)	25 191	29 629	35 170	37 570	38 388	2.2%	9.1%	29.6%	52.4%	
Vehicle kilometres (millions)		482 951	507 814	529 508						
Registered vehicles per 1,000 population	440.1	503.0	560.4	577.0	576.7	-0.1%	2.9%	14.6%	31.0%	



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