

Crashes - Whose Fault?

Despite advice from motor insurance companies to policy holders at the scene of a crash not to admit liability, some do say “sorry” as though to admit liability. When completing the insurance paperwork there is rarely a driver who accepts responsibility for being at fault. The insurance companies and the police, if they are involved, have the business of apportioning blame.

What causes crashes? Are the vehicles we drive unsafe? Is the road and traffic environment dangerous? Is it because other road users behave so badly?

An enormous amount of statistical data on collisions in the UK is published yearly by the Stationery Office informing us of virtually every detail about the types of vehicle and road user involved; where the collisions happen and the circumstances in which they occurred. From this information trends can be detected, analysed and various remedies considered.

The Vehicles

Every vehicle manufacturer is obliged by law to design and engineer cars to at least a minimum safety standard. Ongoing research and development has produced technically sophisticated vehicles that are, especially when compared with the earliest motor vehicles, very easy and safe to drive. The primary aspects that are intended to prevent drivers crashing include:

The Brakes. Dual circuit brake systems make total brake failure unlikely. Disc brakes are now fitted on at least the two front wheels. These are more effective than the drum type which can get hot and “fade”. ABS (Anti Blockier System), known as anti-lock brakes prevent the wheels locking up during emergency braking therefore allowing you to swerve to avoid a collision.

Road Holding. The types of vehicle transmission, choice of manual or automatic gearbox, quality of suspension and tyre condition are factors that affect your car control. Having the front wheels pull you're the car round a bend makes for a feeling of a more comfortable, stable and enjoyable ride! Front wheel drive on snow and ice is more likely to keep you moving than having the rear wheels trying to push. Four wheel drive vehicles give you a better chance of coping with lose surfaces and rough terrain. Drivers in Britain prefer manual gears to deal with our country's windy roads and hills, as opposed to an automatic gearbox which can't anticipate the need to change before the hazard. While ABS and four wheel drive improve your vehicle's handling and grip on the road surface, it is an illusion to believe that such features suspend Isaac Newton's laws of physics.

Visibility. An adjustable driver's seat for comfortable reach of the controls and maximum view of the road ahead. Vehicle designers ensure that dash board dials and instruments can be viewed without difficulty and that there's plenty of ventilation or warm air is available when needed. Headlights and direction indicators provide visibility and a means of communication.

The secondary aspects are intended to lessen the consequences by minimising injuries when an accident does occur.

The more obvious features to car users are adult seat belts and child restraints. In the event of a sudden stop, these prevent you or your child being thrown forwards through the windscreen. Head restraints play an important role by reducing the effects of whiplash.

Stiffness of the body shell varies in different parts of the car, depending on the potential need for energy absorption during an accident. For instance, the roof and pillars are harder than the bonnet.

Design features that you don't see include front and rear crumple zones; a collapsible steering column and airbags; reinforced door beams; anti-burst door locks and a rear fuel tank. For your protection the windscreen glass is laminated and your steering wheel is padded.

To reduce the extent of injury that a car causes a pedestrian on impact your car has a low front end; rounded corner design; soft bumpers; sprung door mirrors and flush handles.

A radar device that automatically monitors safety margins and stopping distances, developed by Mercedes Benz are an optional extra on their cars.

Modern car maintenance requires some simple routine checks. Provided you do these; have it regularly serviced and MoT tested when and where necessary, component failures can be kept to the minimum and it should seldom let you down.

The Road and Traffic Environment

Local authority Road Safety Officers (RSOs) and traffic engineers work in association with the police to design safe road layouts and traffic management systems. The Department of Transport, Local Government and Regions (DTLR) provide guidelines in these aspects, but an increasing amount of design flexibility is allowed in order to suit local conditions. The aspects that they're concerned with are:

Hazard visibility. Dangers in the road may be permanent ones such as junctions; bends and pedestrian crossings, or they can be of a more temporary nature, such as road works; parked vehicles or animals crossing the road!

The road surface; its type; colour; level of maintenance; amount of tyre grip; use of "cats-eyes" reflector studs and road markings. A new generation of "smart" road reflector studs have been tested, branded as "Nightflasher". These British designed high-tech "intelligent" cats-eyes can flash warnings and act upon information about the state of the road. They can differentiate between night and day and, at dusk, automatically switch on a light emitting diode which has an inbuilt solar-powered battery. It only needs an hour of daylight for a night-time's worth of illumination. They can be seen from more than 900 metres away and can be programmed to flash warnings and change colour. Because they are linked by infrared beams, they can change in unison. One idea is that they could turn blue to warn of ice. The sensors can identify fog, increase in brightness and can determine if a road is obstructed, transmitting signals to warn drivers.

Use of street furniture, including placement of street lighting, traffic signs, bollards and crash barriers.

Traffic control measures include traffic light signals and timed phase management; pedestrian crossings and roundabout systems. Traffic “calming” schemes including speed humps and cushions; pedestrian tables; chicanes and speed cameras has reduced crash casualties by 70%.

The weather, throughout the year can create additional hazards or aggravate existing dangers.

Safe traffic flow. Our original roads, built for horses and carts developed into two way “black top” roads. With the growth in traffic, roads in town centres became one way systems and towns were by-passed with dual carriageways.

Statistically, motorways where high speed driving and the overtaking manoeuvre are made easier, are our safest roads. To ease fuel consuming congestion and air pollution variable motorway speed limits are now in place on smart motorways.

With the expansion of the internet there is less need for commuter and family journeys, as we to work from home and use our computers more for shopping.

Road User Behaviour

A list of rules for all road users on how to behave when using the public highway is given in one of this country’s best selling publications, the Highway Code.

Cracking the Code - The Code applies to pedestrians, cyclists and horse riders as well as drivers and riders. Where everybody follows these rules, the risk of an crash, a near miss or road rage happening is kept to a minimum. The Code doesn’t give anybody the right of way in any circumstance, but it does tell you when you should give way to others.

Nobody is perfect. - “He who never made a mistake never made a discovery”. - This quote from the Scottish writer, Samuel Smiles (1812-1904) might help us accept the inevitability of human fallibility. A misjudgement of a situation and experiencing the consequences is learning the hard way. Mistakes can occur because of a genuine lapse of concentration due to a distraction. Things can also go wrong due to an “Act of God”, for instance where a driver is stung by a bee.

Violations of the Code can be deliberate and calculated to varying degrees, where, for instance, the driver knows the risk but ignores the danger. A recent survey identifies 50% of motorists who admit to eating at the same time as driving. Their “crash diet” typically includes bags of crisps, chocolate bars, sweets, sandwiches, pies, burgers, chips, doughnuts and kebabs! Should we be surprised that ... human error accounts for over 90% of crashes, the costs to ourselves and others can be extremely high not only in financial terms, but also in personal, social and environmental aspects.

“Stupid mistakes are always made by others, we only make unavoidable errors !”. The human tendency when we make a mistake is to say “but it wasn’t my fault” and blame somebody or something else. This is characterised by 80% of surveyed drivers involved in crashes who stated that they felt that “the other person” could have done something to prevent the collision happening. Only 5% admitted that they had done something unexpected.

Driver surveys consistently reveal that the majority consider themselves more skilful and safer than the average driver. Evidence from many international sources including the Stationery Office Casualty Reports and the files of the Association of British Insurers (ABI) suggests that this can't always be so !

National statistics reveal that 20% of all driver casualties are aged between 17 and 25 represent 10% of the total number of full licence holders. The casualty pattern is repeated throughout Europe where youth's involvement in fatal crashes range between 20 to 50%, again compared to 10% for the total driving population.

Driver Trainers use various resources to assist their lesson preparation. Knowledge of the location, circumstances and causes of crashes can be a powerful tool to steer new drivers away from costly collisions.

Cars don't crash, but drivers do!

Modern cars are manufactured to very safe standards and the environment they're driven in is engineered to minimise the injuries occurring during a crash. The most difficult area to change is aggressive driver behaviour and selfish attitudes. This is often dealt with by enforcement measures.

Research shows that the incidence of road collisions involving learner drivers is very low. However, having passed their tests and driving unaccompanied without L-Plates, these drivers join the highest road crash risk group.

A survey of new drivers who've received fixed penalties or court summonses has shown that 42% had been involved in a road collision, as opposed to 18% of those who had not been prosecuted for any offence.

Amendments to Section 158 of the Road Traffic Act 1988 have moved crash costs onto the negligent driver's insurance company, who in return are increasing their premiums accordingly.

The maximum legal penalties surprise most experienced drivers when they are up for prosecution in Court.

The secret is to stay out of Court and avoid collisions by:

- not overestimating your driving capabilities and
- not underestimating your personal vulnerability !

While there is always an inevitable degree of risk associated with driving, avoid taking or justifying antisocial ones.