

# INSURANCE AND VEHICLE INCIDENTS TODAY

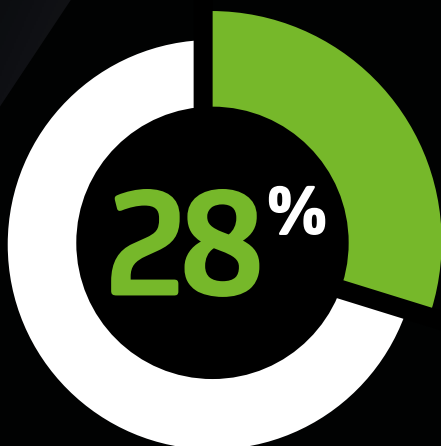
New technologies can help organisations better manage and reduce the number of vehicle incidents. Some technologies are helping to prevent accidents in the first place, while others are providing direct evidence of poor driving judgement or illegal driving behaviours which can then be rectified through a training programme before a serious incident occurs.

When incidents do occur, innovations such as crumple zones are helping improve the safety of the driver and support an organisation's moral obligation to provide a safe working environment. However, although technology can support a safety focus it needs to be backed up by a strong driver policy that puts the wellbeing of the driver first.

## TELEMATICS – SUPPORTING SAFER DRIVING



**TELEMATICS** can reveal unsafe driving behaviours, such as excessive cornering speeds or harsh braking/acceleration, and identify employees who are regularly driving for long hours. The resulting information provides fleet managers with evidence to show which drivers need additional driver training. This perhaps explains why more than a quarter of organisations are likely to introduce telematics over the coming two years, with a similar number being likely to introduce training on accident avoidance and safer driving in the same timeframe.



OF BUSINESSES ARE LIKELY TO INTRODUCE TRAINING ON ACCIDENT AVOIDANCE AND SAFER DRIVING IN THE NEXT TWO YEARS

Evidence resulting from telematics puts an onus on an organisation to act upon it immediately, as driver safety should be a key focus for any organisation that uses employees to drive on company business. This could be through driver training or changing the organisation's working patterns to reduce the amount of time spent driving.

If no action is taken despite clear evidence of dangerous driving behaviours, the organisation can be held partially liable if their driver is then involved in an accident.

## TELEMATICS AND INSURANCE COMPANIES

When insurers require full fleet telematics as part of their policy, they may ask for evidence that driving behaviours are being monitored, drivers are being educated and safer driving practices are being followed. Proving this may require regular reports or data to be sent to the insurer, placing added burden on a fleet manager or nominated person.

## DASHBOARD CAMERAS

Cameras are becoming increasingly popular as a way to reduce insurance premiums and provide evidence in the event of a crash. As well as outward-facing cameras, there is an increasing uptake of cameras pointed at the driver. These can prove a driver was not distracted or using a phone before an accident or incident. These cameras can also be fitted with fatigue alarms that monitor the driver's facial features to detect signs of alertness – and this is a built-in feature in some new vehicles.



33%

OF BUSINESSES ARE LIKELY TO INTRODUCE CAMERAS ON VEHICLES OVER THE NEXT TWO YEARS



37%

OF DRIVERS WOULD SUPPORT THE INSTALLATION OF CAMERAS ON THEIR CAR TO RECORD ANY INCIDENTS



3%

OF DRIVERS ALREADY HAVE CAMERAS INSTALLED ON THEIR VEHICLES

There is a feeling amongst organisations that technology is improving driver safety, an opinion supported by 58% of company car drivers and 54% of private car users. However, driver monitoring systems are only effective if the data is regularly checked and acted upon. If incidents are not identified or followed up by a line manager then drivers will quickly assume the systems are not monitored and could revert back to unsafe driving behaviours.

Telematics and dashboard cameras require education and communication programmes for staff. This includes fleet managers who will need to be trained in how to interpret the huge amounts of data these systems provide. Exception reporting is key to achieving this, as it quickly and effectively identifies only the drivers and behaviours that needs action.

Some employees may show some resistance to working with driver-monitoring technologies. Managers will therefore need to spend time explaining the benefits and use of the system.

In the event of an accident, the invisible witness can support a driver’s explanation of what happened, and such technology is becoming more and more prevalent and important. In a recent trial, none of the ‘expert witnesses’ of an accident had been physically present at the scene. Instead they were called to testify about mobile phone usage and telematics to corroborate the driver’s claims.

### ACCIDENT-ANALYSIS TECHNOLOGY

Dashboard cameras – both inward and outward facing – can be invaluable when analysing the causes of an accident. Like telematics, they are subject to privacy and data-protection laws and should be treated accordingly.

Some modern vehicles also have built-in data recording, so they can detect details such as whether the horn was used or the brakes applied in the 30 seconds before an accident. In the case of a serious incident this information can be used for evidence in legal cases.

### THE INVISIBLE WITNESS

The combination of a **TELEMATICS** system and dashboard cameras can act as an ‘invisible witness’ to accompany the driver at all times. Just the knowledge that they are being monitored can influence driver behaviour in a positive way.

### THE PARADOX OF AUTOMATION

Vehicle safety technologies such as Electronic Stability Programme, ABS, collision-detection systems, fatigue alarms and lane departure warning systems can all help to reduce the number of incidents.

However, the risk with many of these technologies is that drivers may either feel their role in driving the vehicle is reduced or that they are better drivers than they actually are. Feeling secure due to the technology, drivers may regularly drive in an unsafe manner so if these technologies fail or are pushed beyond their limits, the resulting accidents are far worse than they would otherwise have been. Despite this, organisations do feel technology is helping improve driver behaviour.

#### ATTITUDES TO TECHNOLOGY

ALL THE TECHNOLOGICAL CHANGES ARE IMPROVING DRIVER SAFETY



58%

COMPANY CAR



54%

PRIVATE CAR



## HEALTH AND SAFETY POLICIES

Managers seeking to make staff more safety aware should highlight safe driving rules in the driver policy, perhaps first making the policy more stringent by going beyond the legal requirements.

For example, although the use of hands-free phones is technically allowed while driving, they have been shown to provide a significant distraction to the driver. The driver policy might therefore ban mobile phone use completely while the vehicle is moving. This is supported by the results of our survey.



**54%**

OF DRIVERS THINK  
MOBILE PHONES  
ARE DISTRACTING



**25%**

THINK VOICE ACTIVATED  
TECHNOLOGY IS  
DISTRACTING



**22%**

THINK  
SAT NAV IS  
DISTRACTING

As an increasing number of semi-autonomous driving aids are added to vehicles, drivers may start to become too reliant on them. The driver policy should therefore emphasise that the driver remains in control and responsible for the vehicle at all times, even if it is partially driving itself.

It will therefore be important for organisations to keep an eye on legislation. They will need to understand and communicate to the drivers when they become legally 'in control' of the vehicle and when the fully autonomous system can be fully relied upon. Currently, the driver remains legally responsible for the vehicle and its use at all times.

## CALL TO ACTION

- The organisation should adopt a 'driver first' mentality when it comes to vehicle enhancements and new technologies. These need to ensure driver safety is paramount.
- When telematics or other technologies are used to monitor driving behaviour, the information provided needs to be acted upon with follow-up training and education. Information is useless unless it achieves its ambition, such as eliminating unsafe driving behaviours in the future.
- Driver policies need to be reviewed to ensure that employees consent to the use of driver-monitoring technologies, such as dashboard cameras and telematics, as they are subject to privacy and data-protection laws. Organisations also need to be aware of their responsibilities when handling the recorded information.
- Drivers need to be trained and educated about new technologies, such as dashboard cameras and telematics. They may show some initial resistance to working with these systems, so the benefits must be explained to help engage them with the organisation's plans.
- Drivers must be made aware of their responsibilities when driving a vehicle, such as not using a handheld phone and only using a hands-free phone in an emergency.
- A full analysis of new technologies can determine how likely they are to prevent accidents and how much they would cost to replace in the event of an accident. To avoid higher repair costs, a major focus should be placed on giving drivers thorough training to support accident avoidance and safer driving behaviours.

# INSURANCE AND VEHICLE INCIDENTS TOMORROW

The rise of partial and fully autonomous vehicles which allow themselves to avoid dangerous scenarios should mean accident numbers fall in the future. Until then, and as drivers become ever more reliant on technology, they may be ill-prepared to control their vehicle when something does go wrong.

The associated costs of an incident may be higher in coming years with the increasing amounts of technology needing to be repaired or replaced.

Various technologies that support safer driving, such as lane departure warnings or collision avoidance systems, are already available on some vehicles. These technologies will become more widespread over the coming years, potentially becoming necessary elements in order to obtain cheaper insurance and support duty of care to employees.

Employees will need to be trained to use these technologies effectively and be told to keep them switched on at all times – switching them off may invalidate an insurance policy or a leasing contract.

## AUTONOMOUS, SELF-DRIVING VEHICLES

Autonomous vehicles are likely to have fewer accidents, but they will require a culture shift as drivers learn to hand over the responsibility of driving to a machine.

In this transition between human drivers and autonomous vehicles, there could be a stage where the driver is not too sure what is expected of them or what they need to do in certain circumstances. This risk needs to be managed during this transition stage.

For example, although some cars already offer self-parking, the driver still has control of the brake and accelerator, and is legally responsible if the car hits something.

As vehicle technologies continue to develop, driver policies must be updated to confirm that drivers still have overall responsibility for the vehicle and must be ready at all times to intervene if a technology fails. For the time being, and until legislation is changed, this means drivers should not be performing tasks, such as using a mobile phone, even if the vehicle is driving itself.

## CARS THAT NEVER HAVE ACCIDENTS

It has long been expected that when vehicles become fully autonomous, accidents will become a thing of the past – and if they do occur, it will be solely down to human error. The technology is currently limited by a number of factors; legislation being perhaps the biggest barrier. As mentioned previously, there is likely to be some confusion when autonomous vehicles share road space with traditionally-driven vehicles.

### SUPPORT FOR CAR AUTOMATION

NUMBER OF BUSINESSES SUPPORTING  
THE INTRODUCTION OF CERTAIN TECHNOLOGIES

**WARNING  
SYSTEMS**  
THAT SENSE  
WHEN DRIVERS  
ARE ASLEEP

**84%**

**HEAD-UP  
DISPLAYS**  
TO REPLACE  
TRADITIONAL  
INSTRUMENTS

**44%**

**AUTOMATIC  
BRAKING SYSTEMS**  
THAT TAKE-OVER  
IN AN IMMINENT  
ACCIDENT

**71%**

**AUTOMATED  
SYSTEMS**  
THAT TAKEOVER  
ALL ASPECTS OF  
MOTORWAY DRIVING

**41%**



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## AUTONOMOUS VEHICLES – INSURANCE IMPLICATIONS

As vehicles move from partial to full autonomy, there will be a 15-20 year period in which a mix of those vehicles will share road space. Currently, there is uncertainty as to where blame would lie should there be an accident between a fully autonomous and manually driven vehicle.

In the same way drivers can make poor driving decisions, so software can come with glitches and bugs which would impact the autonomous vehicles' driving procedures, so it cannot be taken as read that the driver would be at fault.

This could mean manufacturers of the systems operating the vehicle being held accountable for any accidents, rather than the vehicle's occupants. Insurance could therefore be linked to the reliability of the systems, and, like any other industry, manufacturers will need to ensure their systems and features keep up with those of their rivals in order to remain competitive.

The Government is currently consulting on the matter as there is a fear that road sharing will create a high potential for confusion and unprecedented scenarios.

## DASHBOARD CAMERAS



33%

OF BUSINESSES ARE LIKELY  
TO INTRODUCE CAMERAS  
ON VEHICLES OVER THE  
NEXT TWO YEARS



The prevalence of dashboard cameras in the UK is expected to increase over the coming years. However, the privacy issues they raise could lead to legislation which may either prohibit their use, as has happened in Austria, Luxembourg and some other European countries, or set limits to how the content can be used and where it can be published, as has happened in Germany.

Although unlikely, UK legislation could set limits on the use of dashboard cameras in the future, while any organisation using its vehicles overseas needs to be aware of the different legislation in other countries so as to avoid potentially breaking local laws.

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## ADVANCED SAFETY TECHNOLOGIES

More and more safety technologies are likely to be introduced in the foreseeable future, such as improved collision avoidance technology, radars and sensors. These can make the actual cost of an accident rise substantially, as the components often mounted in the grill or bumpers may need repairing or replacing.

In future, seatbelts that monitor the driver's heart rate might also become more common. This could prevent accidents by letting the car take over driving in the event that the driver has a heart attack, and the technology could even call the emergency services to potentially save the driver's life.

Blink sensors to monitor the alertness of drivers will also help deliver improved driver safety in the future. These sense if a driver is falling asleep at the wheel and emit a warning signal to provoke a response.

These technologies could, however, also trigger negative reactions from some users who perceive it as a further invasion of privacy. Some may also perceive this as being discriminatory against older drivers. Assurances against such discrimination will need to be included in driver policies.

## FUTURE ADVANCES IN ACCIDENT PREVENTION

Radar-assisted automatic braking systems will improve and become more widespread over the coming years, so most cars will soon be able to automatically avoid many collisions.

Connectivity is seen as the next big safety feature. Vehicles will be able to send signals to each other, so one doing an emergency stop or rapid braking manoeuvre can let the vehicles behind know about the hazard, enabling them to take similar action.

Vehicle-to-infrastructure technology will also see vehicles communicating with roadside furniture such as traffic lights, which could send a warning signal when they are about to change to red. Satellite navigation will also provide more accurate, real-time information about accidents, traffic jams and unsafe conditions, so drivers can avoid incidents more easily.

Other near-future advancements could include airbags that deploy underneath vehicles to slow them down seconds before an inevitable collision, and dashboard technology that can jam a mobile phone if it detects one being used by the driver.

## FUTURE DRIVER POLICIES

Driver safety policies will need to be continually reviewed to keep them relevant. Policies on health and wellbeing as well as accident prevention will be important, especially as the UK population ages.

Telematics will become even more linked to an organisation's health and safety policies, and drivers will need to be engaged with this technology for it to be fully effective. However, the myriad of different warnings, together with other connected technologies, could mean distractions for the driver. Driver policies must therefore firmly state that the driver is responsible for the vehicle at all times, even if it is ostensibly driving itself, and this will remain the case until legislation changes.

### CALL TO ACTION

- A strong driver policy is needed to ensure drivers have all safety features switched on and meet the needs of insurers, while knowing exactly what is expected of them when in control of a company car or business fleet vehicle.
- Drivers should be told that technologies such as self-parking and cruise control still place full responsibility on them in the event of an accident or incident.
- Vehicles and technologies will continue to evolve, with more autonomous elements likely to feature in future vehicles. However, driving will continue to be a 'brain on' scenario for the foreseeable future, so drivers should remain alert and ready to take full control at all times.
- Dashboard cameras are likely to become more common in the UK, so their use will need to be referenced in driver policies.
- Drivers must be fully aware of all the safety technologies on their vehicle and fully engaged with the benefits they provide.
- Future driver-safety policies will need to be regularly reviewed to ensure they remain relevant to technological advances.
- When vehicles come to the end of their cycle, organisations must be aware of any upcoming legal changes in terms of health and safety that might affect their choice of vehicle.
- Some technologies that are currently an added extra, such as automatic braking, could become legal requirements or necessary under insurance or leasing agreements. This needs to be managed when vehicles are being replaced.