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DRIVER FATIGUE AND ROAD ACCIDENTS

Introduction

Driver fatigue is a serious problem resulting in many thousands of road accidents each year. It is not possible to calculate the exact number of sleep related accidents but research shows that driver fatigue may be a contributory factor in up to 20% of road accidents, and up to one quarter of fatal and serious accidents.

These types of crashes are about 50% more likely to result in death or serious injury as they tend to be high speed impacts because a driver who has fallen asleep cannot brake or swerve to avoid or reduce the impact.

Sleepiness reduces reaction time (a critical element of safe driving). It also reduces vigilance, alertness and concentration so that the ability to perform attention-based activities (such as driving) is impaired. The speed at which information is processed is also reduced by sleepiness. The quality of decision-making may also be affected.

It is clear that drivers are aware when they are feeling sleepy, and so make a conscious decision about whether to continue driving or to stop for a rest. It may be that those who persist in driving underestimate the risk of actually falling asleep while driving. Or it may be that some drivers choose to ignore the risks (in the way that drink drivers do).

Crashes caused by tired drivers are most likely to happen:

- on long journeys on monotonous roads, such as motorways
- between 2am and 6am
- between 2pm and 4pm (especially after eating, or taking even one alcoholic drink)
- after having less sleep than normal
- after drinking alcohol
- if taking medicines that cause drowsiness
- after long working hours or on journeys home after long shifts, especially night shifts

Drivers most at risk

Young male drivers, truck drivers, company car drivers and shift workers are most at risk of falling asleep while driving. However, any driver travelling long distances or when they are tired, is at risk of a sleep related accident.

Young male drivers are most commonly involved in sleep-related road accidents, but this may be because they are more likely to drive in situations which are likely to lead to fatigue rather than because they are more susceptible to falling asleep at the wheel. Similarly, shift workers and commercial vehicle drivers may have a higher risk of sleep-related crashes due to work-related factors.



Road Safety..... Information

Many professional drivers, especially HGV drivers report increased levels of sleepiness and are involved in a disproportionately high number of fatigue-related accidents. However, two thirds of drivers who fall asleep at the wheel are car drivers. Most (85%) of the drivers causing sleep-related crashes are men, and over one third are aged 30 or under.

Sleep Disorders

Anyone who suffers from a sleep disorder that prevents them from getting sufficient sleep is likely to be excessively tired during their waking hours, and so to be at higher risk of falling asleep when driving. Those most at risk of suffering from a sleep disorder, such as sleep apnoea, include professional drivers. It has been estimated that such drivers are between 6 and 15 times more likely to have a road traffic accident than those without the condition.

This type of medical condition is often undiagnosed, and some drivers may be unwilling to seek help because they fear losing their driving licence. However, there are established treatments for sleep apnoea which allow drivers to retain their licence, and therefore, their livelihood. Anyone suspecting that they have a sleep disorder is strongly advised to contact their GP.

How To Avoid Falling Asleep at the Wheel

The Highway Code (Rule 91) gives the following advice:-

Driving when you are tired greatly increases your accident risk. To minimise this risk

- Make sure you are fit to drive. Do not begin a journey if you are tired. Get a good night's sleep before embarking on a long journey.
- Avoid undertaking long journeys between midnight and 6am, when natural alertness is at a minimum
- Plan your journey to take sufficient breaks. A minimum break of at least 15 minutes after every two hours of driving is recommended
- If you feel sleepy, stop in a safe place. Do not stop on the hard shoulder of a motorway
- The most effective ways to counter sleepiness are to drink, for example, two cups of caffeinated coffee and to take a short nap (up to 15 minutes).

Most of the things that drivers do to try to keep themselves awake and alert when driving are ineffective, and should only be regarded as emergency measures to allow the driver time to find somewhere safe to stop. Drinking at least 150 mg of caffeine and taking a nap of around 15 minutes are the only measures that help to reduce sleepiness. But even these are temporary measures; sleepiness will return if the driver does not stop driving within a fairly short period of time.

The safest option is for drivers to avoid driving when sleepy, when they would normally be sleeping or when they are ill or taking medication which contra-indicates driving or using machinery. It is crucial that drivers plan journeys, especially long ones involving driving on motorways or other monotonous roads.



Road Safety..... **Information**

Drivers should:

- Try to ensure they are well rested, and feeling fit and healthy (and not taking medication which contra-indicates using machinery), before starting long journeys
- Plan the journey to include regular rest breaks (at least 15 minutes at least every two hours)
- If necessary, plan an overnight stop
- Avoid setting out on a long drive after having worked a full day
- Avoid driving into the period when they would normally be falling asleep
- Avoid driving in the small hours (between 2am and 6am)
- Be extra careful when driving between 2pm and 4pm (especially after having eaten a meal or drunk any alcohol)
- If feeling sleepy during a journey, stop somewhere safe, take drinks containing caffeine and take a short nap.

RoSPA produces a free guide, "[Safer Journey Planner](#)" (PDF 535kb) which gives advice to drivers on how to avoid the risk of falling asleep at the wheel.

Alcohol and Medicines

Even small amounts of alcohol, well below the legal drink drive limit, will exacerbate driver sleepiness, so that a tired driver who has had some alcohol will be even more impaired and likely to crash.

Many over-the-counter medicines, including remedies for coughs, colds, flu and hay fever, cause unwanted drowsiness which might impair driving. Warnings about drowsiness are not always clear so, for example, if the label says "may cause drowsiness", assume that it will do so.

Fatigue Detection and Warning Devices

There are devices to detect when drivers are feeling sleepy and to warn them. However, RoSPA is concerned that would rely on them, and may even be tempted to drive when they are tired, believing that the device will prevent an accident. It is far better for drivers to avoid driving when too tired, to plan their journeys safely and follow the advice in the Highway Code and RoSPA's guides.



Road Safety..... Information

Employers

Driving is the most dangerous work activity that most people do. It is estimated that around 150 people are killed or seriously injured every week in crashes involving someone who was driving, riding or otherwise using the road for work purposes. The majority of these tragedies can be prevented. HSE Guidelines, "Driving at Work", state that *"health and safety law applies to on-the-road work activities as to all work activities and the risks should be effectively managed within a health and safety system"*. Therefore, employers must assess the risks involved in their staff's use of the road for work and put in place all 'reasonably practicable' measures to manage those risks.

One of the most important things employers must do is ensure that their drivers are not at risk of falling asleep at the wheel.

RoSPA's free guide, "[Driving for Work: Safer Journey Planner](#)" gives advice to employers on how they can do this.

Holiday and Travel Companies

One of the times when individual drivers may drive in the early hours of the morning is when they are catching, or returning from, an early flight or ship/ferry journey. Drivers returning from long haul flights, or coming off ships and ferries also often drive home after having had very little sleep in the previous 24 hours. Holiday companies, airlines and shipping lines should consider what advice and information they could offer to their customers, particularly as they sell alcohol to their passengers, which exacerbates the risk.

REFERENCES

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