Causes & Prevention of Driver Fatigue

Preventing Falling Asleep at the Wheel

Driver fatigue is a serious but under-recognised road safety issue. It is considered to play a significant part in up to 25 per cent of vehicle accidents on motorways, longer dual carriageways and other fast roads.

Because drivers who fall asleep at the wheel usually fail to take evasive action (such as braking and swerving) before crashing, the resulting impacts and injuries are generally more severe than in other kinds of road accident.

Accidents due to falling asleep at the wheel are more likely to occur at certain times of day – typically from midnight to 2.00am, in the early hours of the morning from 4.00 am to 6.00am and in the early to mid afternoon, typically 2.00 – 4.00pm.

Factors that may predispose drivers to falling asleep at the wheel include:

• the amount and quality of sleep before driving (the most important factor);
• consumption of alcohol (which may potentiate sleepiness at the above times even at levels below the legal maximum blood-in-alcohol concentration) or sleep inducing drugs;
• certain kinds of illness;
• boredom (especially on long, featureless roads and where the driver is alone in the vehicle);
• age (the tendency to ‘dip’ increases in middle years and there is also research arguing that younger people do experience an increasing need for sleep, which is not helped by their often hectic social activities).

Feeling tired at the wheel can affect the driver’s ability to concentrate, to correctly perceive, assess and respond to road hazards and to make safe driving decisions. It can increase reaction times as well as levels of stress and irritability. Research confirms that drivers who fall asleep at the wheel are conscious of feeling sleepy and continue to ‘fight’ sleep for some time before crashes occur. They may however have fallen asleep for a short period, say 30 seconds (in which time, at 70 mph, they will have travelled over 1000 yards!) but have no recollection of this.

Driving while fatigued is an offence under road traffic law and may result in prosecution leading to imprisonment and other penalties. Where employers have caused their employees to work and/or drive for so long that they become dangerously fatigued, they too may be guilty of an offence and may be liable to prosecution under road traffic or health and safety law.

Ten point Code on Preventing Falling Asleep at the Wheel

1) Safe journey/safe driver
When assessing risks to establish safe systems of driving, employers should ensure that ‘the driver is fit to drive and that the drive is fit for the driver’. In practice this means firstly that employers should ensure that employees are not over-tired at the start of journeys and that they are not required to drive for an excessive number of hours. Journeys should be carefully planned in advance and designed so as to enable drivers to take a break of at least 15 minutes every 2 hours. When driving to carry out other work tasks, drivers should not normally be required to drive more than 350 miles in a single day.
2) Raising Awareness
As part of driver training, employers should ensure that drivers are reminded about:

• the danger of falling asleep at the wheel;
• the need for safe journey planning;
• the early signs of fatigue and the times of day at which sleepiness is most common;
• the strategies which they can employ to cope with its onset should it occur; and strategies
  which are generally ineffective (see below).

(Although there are a variety of technological devices which, it is claimed, can detect
the onset of driver sleepiness, drivers should not rely on such devices but plan head
for adequate rest. RoSPA stresses the need for drivers to be fully briefed on this issue
so that they are alert to the problem and can take appropriate action.)

3) Safer Alternative Travel
Where long journeys cannot be undertaken without a significant risk of drivers becoming
fatigued, consideration should always be given to using remote communications such as video
conferencing as an alternative or to using safer, alternative transport modes (although where
train/drive or fly/drive options are considered, drivers will need vehicle familiarisation).

4) Preparation for Driving
Line managers should ensure that employees are made aware of the need to get an adequate
amount of good quality sleep before starting to drive. Rest is not a substitute for sleep!
Employees should be reminded of the dangers of common practices such as ‘moonlighting’ or
spending too long engaged in evening hobbies, social activities or domestic work that may limit
time available for sleeping.

5) Reporting Fatigue
Employees whose sleep may be interrupted, for example, by having to care for young children
or sick or elderly relatives during the night, should be asked to report this to their managers and
be reassured that this will not lead to them being discriminated against unfairly.

6) Shift Arrangements
Night shifts and rotating shifts cause the most severe sleeping disruptions of any work schedule.
Research has also shown that 12-hour shift workers, compared to 8 hour, were significantly
sleepier at the end of their shift, especially at 7.00am. Employers should review shift
arrangements, wherever possible in consultation with safety representatives, to see that these
do not lead employees to drive while fatigued. Where particular shift patterns may give rise to a
potential problem, including increasing risks during commuting to and from work, safer,
alternative transport should be considered.

7) Driving Home
Drivers should be warned about the risks involved in driving home for long distances after a
day’s work away from their normal base. Attention should be drawn to the dangers of driving for
long periods on long stretches of boring and monotonous road. Consideration should be given
to always allowing drivers to ‘overnight’ away from home, while recognising that many
employees will seek to return home for domestic reasons.

8) Safe Coping Strategies
In particular, employers should stress that when drivers feel sleepy, they must stop in a safe
place as soon as practicable. Warnings should also be given about ineffective coping strategies
(winding the windows down, turning up the radio, singing songs, chewing gum), stressing that, if sleepiness does occur, the best short-term measure is the consumption of two cups of strong coffee followed by a ten to fifteen minute nap. It is important to stress that this should not be used more than once in a single journey and that sleep should not last more than twenty minutes otherwise even greater driver impairment may result due to increasing grogginess.

9) Active Monitoring
Employers need to be able to monitor driver sleepiness along with other key indicators of at-work road safety performance. Managers, for example, should ask their drivers about this problem during periodic performance appraisals. Journey planning should be monitored, for example by sampling, to see whether safe journey parameters are being observed.

10) Reactive Monitoring
Finally, drivers should be encouraged and thanked for reporting on instances when they have experienced sleepiness at the wheel, both to share such experiences with colleagues and to see what lessons, if any, can be learned. Crashes while driving for work, particularly those with no other apparent cause, should be investigated to establish whether fatigue or sleepiness may have been a contributory factor.

Remember:
TIREDNESS KILLS, DON'T FIGHT SLEEP - STOP IN A SAFE PLACE AND TAKE A BREAK!