

accidents don't have to happen

connected through driving for work in Scotland

Driving tired kills conversations about Fatigue and Driving Risk

Dr Karen McDonnell, CFIOSH, Chartered FCIPD
OHS Policy Adviser, Head of RoSPA Scotland, Past President IOSH

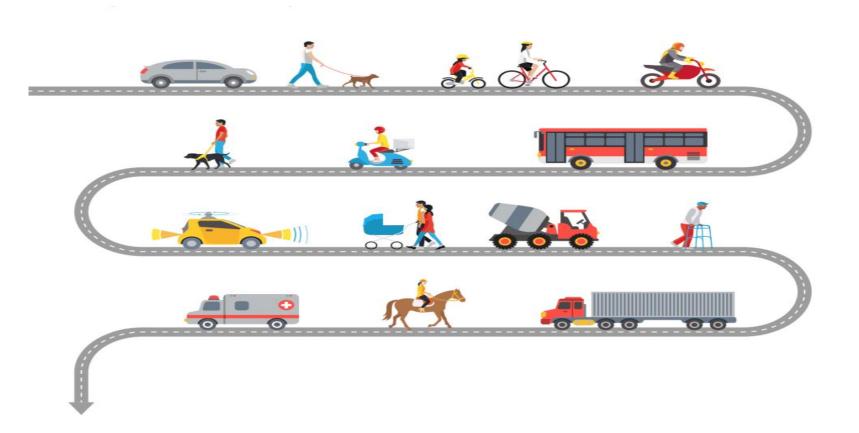


PAUSE...









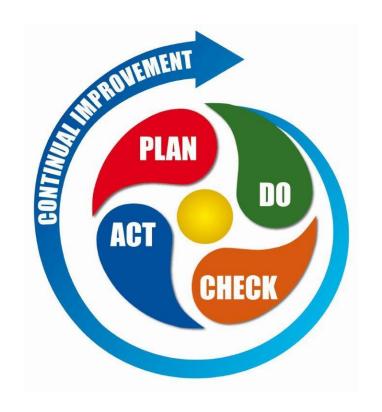


















A guide to workplace transport safety



HSG136 (3rd edition) Published 2014

This guide provides advice for employers on what they need to do to comply with the law and notices risk. If will also be useful for managers, supervisors, employees and their safety representatives, as well as contractors, whiche operators and other organizations concerned with wedgalace transport safety.

The new guide is much shorter and more streamlined than the previous edition and includes advice on your general legal duties and information on health and safety management. There is also more specific advice on contributing tribs associated with varieties transport, which has been nectructured into three main areas:

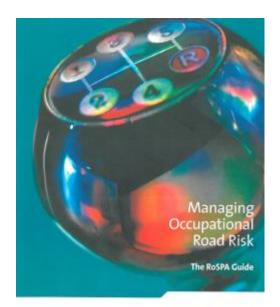
- sale site (design and activity);
- safe vehicle;
- safe-driver

The new edition has been updated to take account of new advice on workplace transport salety and size to reflect changes to solvent legislation and associated guidance. There are new sections on multi-deck vehicles and multi-obt obliveries, as well as minor changes to other sections, such as on weightedges and sheeting.





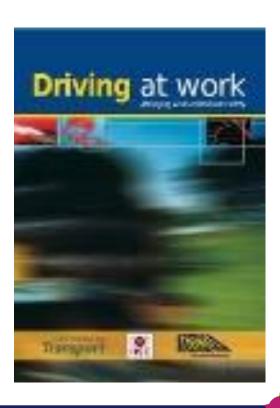
















Your assumptions are your windows on the world. Scrub them off every once in a while, or the light won't come in. - Isaac Asimov

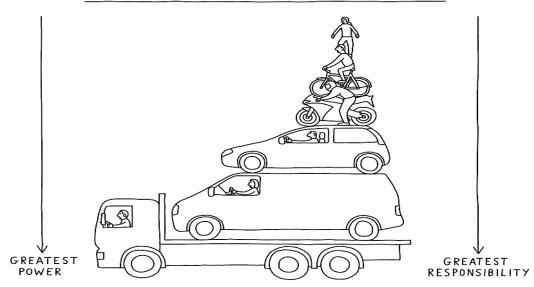
What does the Highway Code say?

- Rule 91
- Make sure you are fit to drive
- Avoid undertaking long journeys between midnight and 06.00
- A minimum break of at least 15 minutes after every two hours of driving is recommended
- Sleepy? Stop in a safe place
- Two cups of caffeinated coffee and a 15 minute nap





GREATER POWER SHOULD BRING GREATER RESPONSIBILITY

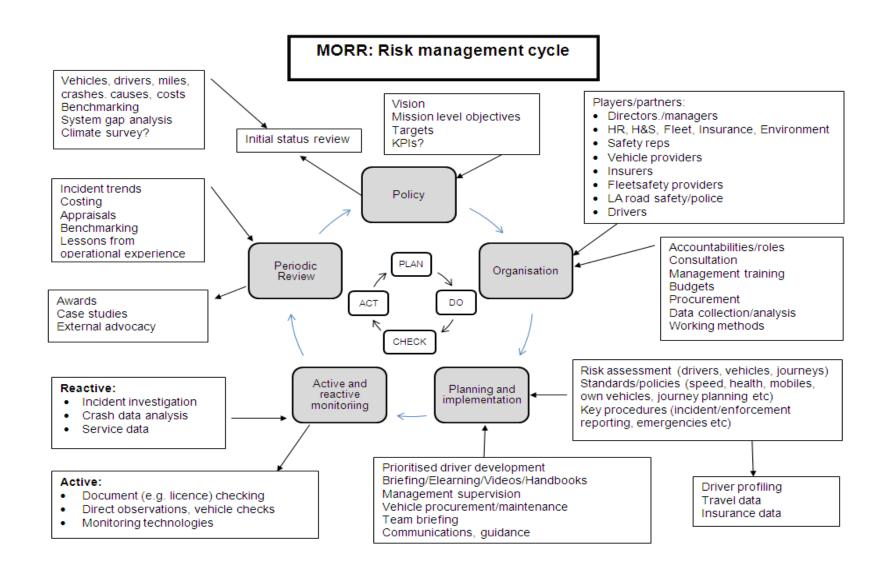


HELP US GET THE HIERARCHY OF RESPONSIBILITY INTO THE HIGHWAY CODE

CYCLINGUK.ORG/HIGHWAYCODE



davewarker.com







Why should we manage driver sleepiness?

- Feeling sleepy is a natural part of human life
- Sleepiness becomes dangerous when completing a safety critical task
- If the brain wants to sleep it will
- 2 sec microsleep at 100kph = 56m



It influences a lot of road incidents

- **16%** of drivers have had "close call" because they were fatigued/sleepy in the past 5 years
- 2.4% have had a sleep related road crash in the past 5 years

Method: Telephone interview with Australian car drivers

- 1,609 participants (50% male)
- Stratified for age and gender, 50% sample aged 30 years or less
- Telephone survey 78.7% response rate

Armstrong, K., Filtness, A. J., Watling, C. N., Barraclough, P., & Haworth, N. (2013). Efficacy of proxy definitions for identification of fatigue/sleep-related crashes: An Australian evaluation. *Transportation Research Part F: Traffic Psychology and Behaviour*, 21, 242-252.

It influences a lot of professional driving incidents

- **36.7%** of London bus drivers had had a "close call" because they were fatigued/sleepy in the previous 12 months
- **5.5%** crashed the bus in the previous 12 months because they were sleepy

Method: online survey open to all London bus drivers. Distributed and promoted through operating companies

- 1,353 participants (86% male)
- Age M = 45 years (Range = 20-73y, SD = 8.46y)
- 96% worked full time as bus drivers

Miller, K. A., Filtness, A. J., Anund, A., Maynard, S. E., & Pilkington-Cheney, F. (2020). Contributory factors to sleepiness amongst London bus drivers. *Transportation Research Part F: Traffic Psychology and Behaviour*, 73, 415-424.

Sleep crashes are most likely to involve

- Young Males
- Single occupant
- Hitting a stationary object
- Be high severity (fatal/serious injury)

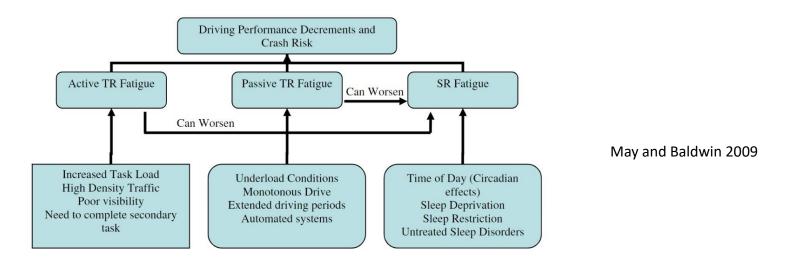


How sleepy do you feel right now?

| | Rating | Verbal descriptions |
|-------------------|--------|---|
| | 1 | Extremely alert |
| | 2 | Very alert |
| | 3 | Alert |
| Safe to drive | 4 | Fairly alert |
| | 5 | Neither alert nor sleepy |
| | 6 | Some signs of sleepiness |
| Safety concern | 7 | Sleepy, but no effort to keep alert |
| | 8 | Sleepy, some effort to keep alert |
| | 9 | Very sleepy, great effort to keep alert, fighting sleep |

Why do you feel this sleepy right now?

- Countermeasure = something that mitigates the impact of fatigue/sleepiness
 - Driver/operator, manager, employer, regulator, etc
- For a countermeasure to be **effective** it must relate to the cause of fatigue
- Multiple factors can cause fatigue = multiple countermeasures will be necessary



Definitions become important for understanding

- **Sleepiness:** Sleep is a natural (biological) thing. It is caused by something. biological and the feeling of being sleepy is what happens when you do not get enough of it
- Fatigue: Fatigue can have many causes. It is usually associated with having to sustain an activity for a long period of time. If you are fatigued at something, you can usually recover from that fatigue by stopping the activity that is causing it
- Performance decrement may be the same, but different causes require different solutions

Naweed, A., & Filtness, A. (2015). Fatigue and sleepiness: complex bedfellows. *Track and Signal: your independent rail magazine*, 19(1), 60-61.

Workplace fatigue and sleepiness

- Fatigue and sleepiness are complex workplace risks
- Work-related and not work-related influencing factors (Gander et al., 2011)
- Driver should turn up fit to work
- Employer should ensure occupational setting is set up to promote alertness
- Countermeasures to manage fatigue and sleepiness for both driver and employer
- Target the specific cause of fatigue



Workplace fatigue management strategies

- Education
- Rest facilities
- Fatigue informed roster planning
- Adequate commute time allowance
- Improving health
- Reducing stress
- Health screening
- OPEN CULTURE

Filtness, A., Anund, A., Maynard, S., Miller, K., Pilkington-Cheney, F., Dahlman, A., & Ihlström, J. (2019). Bus driver fatigue. https://content.tfl.gov.uk/bus-driver-fatigue-report.pdf

Fatigue management challenge

- Managing worker fatigue is hard!
- Complex, wide variety of causes, no single solution
- Everybody sleeps,
 everybody gets tired, every
 driver/operator/pilot has
 the potential to become
 fatigued







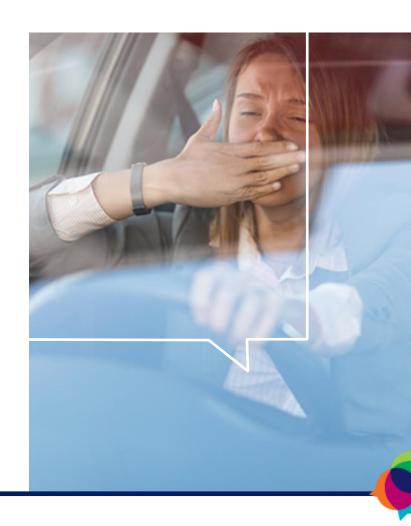






Fatigue and driving – the facts

- Up to 20% of road accidents and 25% of fatal and serious injuries
- 50% of those are more likely to result in death or serious injury as they tend to be high impact





Managing fatigue in the workplace

- Shift workers
- Non shift workers
- Policies and communication
- Raising awareness
- Training
- Risk assessments







- Hungry
- Angry
- Late
- Tired

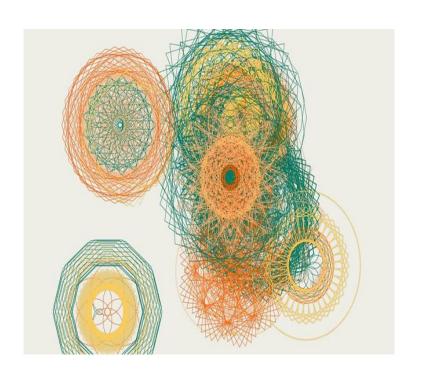


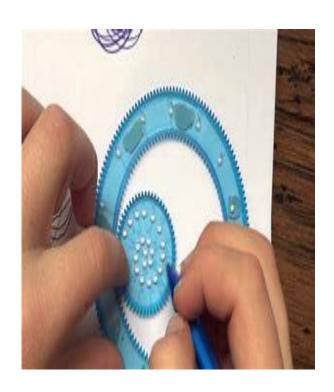


Zac Payne and Michael Morris

- Renown Consultants Limited fined £450,000 fined for failing to ensure the men were' sufficiently rested to work and travel safely'
- 'a reminder to companies that safety comes first and fatigue policies should be enforced to ensure their workforce is not too tired to work'



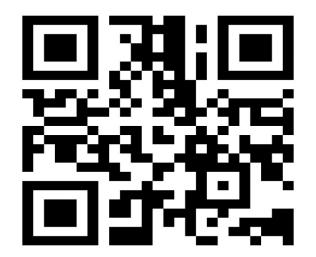












Scottish Occupational Road Safety Alliance raise employers' awareness of the need to Manage Occupational Road Risk.

Free information and advice, one to one support

Thankyou

Any Questions?



