

stay awake, stay alive

*We all know that driver fatigue is bad news. But just how ghastly is it? Dr Irshaad Ebrahim, medical director of the London Sleep Centre, who spoke at the RFA Conference, warns that it can be deadly. Of particular concern, he says, is a disorder called obstructive sleep apnoea – commonly known as OSA in the medical world. And the really bad news is that truck drivers are highly likely to suffer from this condition. By **CHARLEEN CLARKE***



Dr Ebrahim warned delegates that many of their truck drivers could be suffering from a deadly disease (for the driver and fellow road users).

Sleep, as we know, is essential for life. A lack of sleep affects our immune system and some people believe that, if you don't have enough sleep, you may even die earlier! However, one thing is certain: if your drivers don't have enough sleep and they hit the road, they increase their chances of early death significantly.

Even if your drivers do not have OSA (more about that later), you are completely nuts if you allow them to hit the road when they are tired. Time and time again,

fatigue has been cited as a cause of accidents – and the end results are often fatal (sleep-related accidents tend to be more severe because the driver is unable to take any avoiding action, or even brake, prior to the collision).

In fact, according to Michelle Baker (author of "An evaluation of sleepiness, and sleep, en route, in South African long distance truck drivers"), sleepy drivers should be considered with the same seriousness as drunken drivers. And we all know the dangers of driving while under the influence...

According to Dr Ebrahim, some 6 percent of all crashes in the United States can be attributed to a lack of sleep. Some 20 percent of accidents in the United Kingdom are attributed to fatigue and one third of accidents in Australia are attributed to sleep-related ailments. A 1996 French study found that more than two thirds of road accidents were caused by two factors: excessive speed and driver fatigue.

Here in South Africa, we are remarkably good at one thing: killing people on our roads. "South Africa has one of the highest death rates in the world,"

the doctor notes. Some 10 000 people die on our roads each year, 10 times more than the UK – and Dr Ebrahim says 1300 of deaths are due to sleepiness. Long and monotonous roads are especially problematical, where accidents are virtually always related to a lack of sleep.

In addition to the obvious loss of life, this trend is also costing the country a fortune. Dr Ebrahim reveals that the average direct cost per fatality is approximately R1,5 million – therefore an annual total cost of about R5 billion!

But what factors influence your drivers' chances of falling asleep? According to Dr Ebrahim, there are four key factors: a driving schedule, the time of day, the quantity and quality of the driver's sleep and the presence of OSA.

The driving schedule is an obvious one – if you drive for extended hours, you will get tired. Truck drivers represent a worrying factor here. It is unknown how many accidents result from this practice but the risk is certainly there – in 1995 the US National Transport Safety Board investigated 107 truck-related accidents and attributed a whopping 58 percent of them to sleepiness.

The early hours of the morning and the middle of the afternoon are the peak times for fatigue-related accidents. Naturally, the afternoon becomes an even greater risk when the driver has had a large lunch. Scientists have also discovered that accidents caused by driver fatigue happen more over the weekend than during the week.

According to Dr Ebrahim, a truck driver needs eight hours of sleep a night and he or she should fall asleep within 10 minutes. And it doesn't help to sleep for five hours one night and then eleven the next. "You will accumulate a sleep debt. It's just like an overdraft – you have to pay into it."

The most serious threat is that of obstructive sleep apnoea – or OSA. But exactly what is OSA? Dr Ebrahim describes it as "a condition in which



A surprise guest at the RFA Conference was ex-Transport Minister Mac Maharaj, who is pictured here with RFA chairman Ben Deysel and his wife, Amanda.

there are interruptions or pauses in breathing whilst asleep". "Symptoms include snoring and sleep interrupted by intermittent gasping for breath," he reports.

According to Dr Gavin Petrie, a chest physician, when someone has OSA, his or her throat is sucked closed during sleep. "If the throat is so narrow that it is partially or completely blocked, the sleeper will fight for breath until they wake up. The apnoea often ends with a loud snore or gasp, along with movements of the whole body. This awakening is sufficient to make their throat opening muscles work so they can breathe in again, but they usually fall asleep again so quickly that they don't remember it happening."

With OSA, this cycle repeats itself throughout the night as the muscles relax and the throat blocks off again – which means that the person really doesn't have a good night's sleep. People with this condition also expend more energy than average on breathing during the night – and their quality of sleep therefore decreases and leads to sleepiness during the day. "This urge to sleep can be very strong and people have been known to fall asleep during conversations, meals, driving a car and even when surrounded by dangerous machinery," warns Dr Petrie.

"This is a very serious disorder," comments Dr Ebrahim. "In fact, it can lead to early death."

The message is clear: if your driver has OSA, he shouldn't be behind the wheel. But to how many people does this apply? The jury is still out on this one. Dr Ebrahim reckons that two percent of women and six percent of men have clinically significant OSA. Truck drivers – who, he says, are 10 times more likely to have this disease – pose a particular hazard on our roads in that half of the drivers on our roads could have this disorder (a frightening thought, given the fact that they are potentially commandeering 56 tons). As a result, in the USA and the UK, truck drivers who are diagnosed with this disorder are taken off the road.

Irrespective of the exact number of sufferers, the consequences are dire. In

the USA, OSA-related vehicle collisions cost \$15.9 billion and 3 400 lives in the year 2000. And, according to the New England Journal of Medicine, drivers with OSA are 6.3 times more likely to have an accident than those without.

But what is the solution to OSA? Because many OSA sufferers are obese, going on a diet is always a good idea. OSA can also be treated with a device called a CPAP machine, so called because it blows a gentle stream of air through the nose at night producing a "constant positive airway pressure". This keeps the pressure in the throat higher than the atmospheric pressure so that the throat is not pressed closed. Many sufferers say this works so well at preventing breathing pauses and snoring that they are no longer sleepy during the day.

However, even if your driver doesn't suffer from OSA, be aware that a tired driver is a lethal driver. Therefore, the message is clear: if your driver is tired, he should pull off the road in a safe area, park his truck and have a nap. ❖

WHAT CAUSES OSA?

- Having a throat that is naturally narrower than normal
- Obesity
- Alcohol consumption and some antihistamines (which relax the throat opening muscles)

HOW CAN IT BE TREATED?

- Lose weight by dieting
- Exercise for 20 minutes or more two or three times a week
- Don't drink alcohol for three hours before going to bed
- Avoid taking sleeping pills, sedatives and allergy tablets
- Sleep on your side or with your head elevated
- CPAP therapy