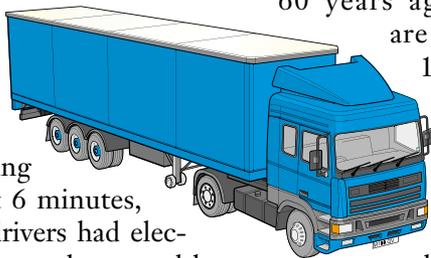




Wake-up call issued about drowsy truck drivers

In a study with implications for highway and workplace safety, long-haul truck drivers in Canada and the US were found to be significantly sleep deprived, averaging less than 5 hours of sleep between shifts (*N Engl J Med* 1997;337:755-61). More than half of drivers videotaped during their runs had drooping eyelids and bobbing heads for at least 6 minutes, and 2 Canadian drivers had electroencephalograms that would normally be interpreted as stage 1 sleep.

The study, sponsored by the Canadian and US governments, involved round-the-clock videotaping and electrophysiologic monitoring of 80 truck drivers for 1 week each. In the Canadian portion, 40 truckers were studied as they drove round trip between Toronto and Montreal on a 13-hour route that began 1 hour later each subsequent day. Twenty of the drivers did a late-



night-to-morning route and 20 drove afternoon to night.

Dr. Jeffrey Lipsitz of the Sleep Disorders Centre of Metropolitan Toronto, who conducted the Canadian portion, says the 2 governments wanted to examine the extent of driver fatigue and the hours-of-service regulations covering trucking, which were put in place about 60 years ago. US truckers

are allowed to drive 10 hours without an 8-hour rest, whereas Canada allows up to 13 hours of driving.

“Simply looking at the total number of hours of driving was not the primary predictive indicator of sleepiness,” says Lipsitz. “Time of day was much more of a factor. But the regulations disregard day-versus-night driving. We have an internal clock that is programmed for periods of sleepiness and alertness. It’s almost impossible to stay awake and alert between 4 and 6 am.”

The study found significant differences in drowsiness according to the time of day, with drivers finding

it difficult to stay awake during late night and early morning hours. There were no significant differences between Canadian and US drivers, despite the longer stints in Canada.

Lipsitz thinks the results are important not only to the trucking industry and regulators but also to other employers, especially those employing shift workers, and to physicians, who are often involved in assessing fitness for duty.

“This is a wake-up call,” he says. “Physicians need to be made much more aware of the hazards of fatigue in the workplace.” An accompanying editorial stated that being sleep deprived is often considered “a badge of honour” that points to hard work. One survey showed that 26% of Americans believe that being successful in a career and getting enough sleep are mutually exclusive.

Lipsitz calls for training and education of workers, schedulers and managers concerning the importance of adequate sleep and the perils of fatigue. This would produce “a more alert, productive, healthy workforce.” — *C.J. Brown*

In the news . . .

From the people who brought you Dolly, it's Polly

In another breakthrough in genetic engineering, Ian Wilmut and his team from the Roslin Institute in Edinburgh have introduced extra genes into sheep cloned from embryonic cells. One of the sheep, named Polly, carries a human gene (*Science* [news item] 1997;277:631). Thanks to the process used to create Dolly, the first clone from an

adult, such transgenic mammals can now be created efficiently. Researchers say that such mammals could some day produce human proteins, such as blood-clotting factors, for therapeutic use.

Amphetamines for children

A controversial study shows improvements in attention, behaviour and intelligence in children with attention deficit hyperactivity disorder

(ADHD) who were given amphetamines (*Arch Gen Psychiatry* 1997;54:857-64). Swedish researchers conducted a placebo-controlled trial of amphetamines in 62 children with symptoms of ADHD. Evaluations of behaviour and cognition, including the Wechsler intelligence scale, showed significant improvement among children receiving amphetamines for 9 months or more. Side effects included a lack of appetite, abdominal pains, tics and hallucinations.