

# Tired drivers as bad as drunk drivers

January 21 2011, by Lin Edwards

---



(PhysOrg.com) -- New research shows that driving for only three hours at night has a similar effect to driving under the influence of alcohol, and even two hours can be equivalent to a couple of drinks.

Researchers at Utrecht University in the Netherlands decided to find out how being tired affects driving ability. They recruited 14 subjects, all healthy males aged 21 to 25, and asked them to drive at night, under supervision, for two, four and eight hour stretches. The driving periods were 3 am to 5 am, 1 am to 5 am, and 9 pm to 5 am.

The volunteers drove along a [motorway](#) at a constant speed of 130 km/h (80 mph) and were required to remain in the center of their traffic lane at all times. Driving safety was monitored using video recordings, and the deviations from the center of the lane was measured.

The researchers, led by Dr. Joris C. Verster, compared the results to the known effects of alcohol on driving and found that two hours of driving produced the same errors as 0.05 percent [blood alcohol](#) (over half the UK drink driving limit of 0.08 percent). After three hours driver performance was equivalent to 0.08 percent, and after four and a half hours it matched the performance of a driver with a blood level of 0.10 percent of alcohol.

The report, published in the *Journal of [Sleep](#) Research*, concluded that [drivers](#) should take [tiredness](#) seriously as it is one of the major causes of accidents on motorways. Drivers may be unaware of their own reduced level of [alertness](#) and their tiredness. The researchers also said playing loud music or opening windows had little effect.

The paper concluded that continuous driving time at night should not exceed two hours, and recommended governments impose a maximum two-hour limit at night to try to reduce the number of accidents and fatalities caused by tiredness while driving. They acknowledge that this may be difficult to police as there is no accurate way of measuring the extent of a driver's tiredness.

According to the researchers up to 20 percent of traffic accidents in industrialized countries can be attributed to sleepiness while [driving](#) because of long periods behind the wheel, or because of the use of medicinal drugs.

**More information:** Prolonged nocturnal driving can be as dangerous as severe alcohol-impaired driving, *Journal of Sleep Research*, [DOI:10.1111/j.1365-2869.2010.00901.x](https://doi.org/10.1111/j.1365-2869.2010.00901.x)

Citation: Tired drivers as bad as drunk drivers (2011, January 21) retrieved 4 May 2024 from <https://medicalxpress.com/news/2011-01-drivers-bad-drunk.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.