

News Archive Transportation until 2007

Avoiding tiredness – DLR model project with Ford truckers demonstrates success of driver alertness training

20 January 2006



Tips against tiredness on the road were researched during DLR training

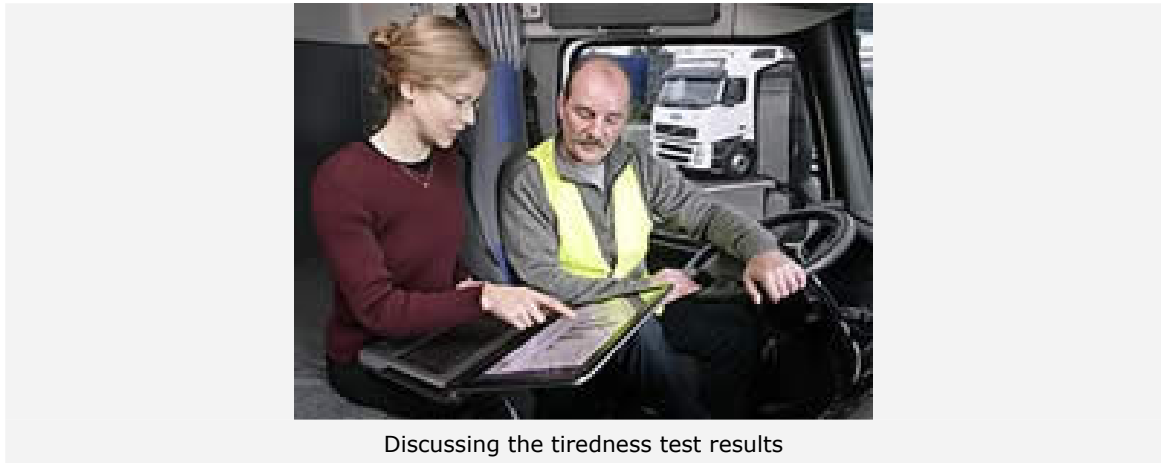
Cologne – Tiredness can be managed, and HGV drivers can protect themselves against the risk of 'microsleep'. 58 long-distance drivers from the Ford fleet in Cologne found this out when they took part in a model project run by the German Aerospace Center (DLR), the German Association of Accident Prevention Organisations, a number of individual accident prevention organisations and the German Road Safety Council between January 2004 and December 2005.

DLR's 'alertness management' project consisted of two parts.

The first part involved driver training. These long-distance truckers were asked to keep 'sleep diaries' to make them aware of their sleeping patterns and habits. They learned to recognise the signs of developing tiredness early and how to decide on the right time to take a break to prevent the risk of falling into 'microsleep'.

Also included were group discussions where drivers shared their personal experiences of the risk of falling asleep at the wheel. Individual telephone consultations with DLR psychologists helped them become more aware of their personal responsibility.

In the second part of the project, the team of scientists gave advice to fleet managers and controllers. After six months, the alertness management training was subjected to a critical effectiveness analysis.



The interdisciplinary group of researchers from DLR's Institute for Aerospace Medicine found a very receptive partner for their project in Ford's German fleet. DLR used the research carried out with the Ford truckers to develop a computer program that provides effective support to controllers and fleet managers in their efforts to achieve maximum safety on the roads.

Using the information recorded, such as journey times, the number of breaks and the drivers' own estimations, DLR computer experts developed a model that shows up weak points where drivers are most at risk of tiredness.

Michael Schmid, manager of the Ford haulage fleet, says: "This allows us to optimise the way we allocate drivers to jobs in terms of the risk of suddenly falling into a microsleep at the wheel."



Taking naps helps avert danger

Scientists at DLR now want to use the experience gained from this model project with Ford, to develop training courses for bus drivers and shift workers in collaboration with accident prevention organisations. Preventive measures like this can save lives and prevent damage to property by averting accidents involving HGVs, which can entail serious consequences.

According to studies by the German Federal Highway Research Institute in Bergisch Gladbach, one in five road accidents are caused by tiredness. The economic damage caused by tiredness-related accidents in Germany is estimated at around €5 billion per year.



Wach-am-Steuer ("Alert at the wheel") kit from DLR

So what if a driver falls victim to tiredness despite all his best efforts and the safety-conscious allocation of work on the part of his employer?

"Then there's just one thing for it," says driving psychologist Jana Roenicke from DLR's working group on alertness management. "Take a 'power nap' of 15 - 20 minutes, then stretch your legs for a bit, get some fresh air and have a cup of coffee if you need one." Trying to combat tiredness by playing loud music or opening the window to let in some air doesn't solve the problem. This will only increase your risk of suddenly nodding off if your alertness level falls.

The drivers and fleet managers at Ford believe that the alertness training has improved the drivers' sense of personal responsibility and enhanced their understanding of the danger of tiredness at the wheel and the measures you can take to prevent it. DLR's successful model project allowed the accident prevention organisations involved to give their activities even more impetus and contribute to enhancing road safety.

Related Contacts

Cordula Tegen

Deutsches Zentrum für Luft- und Raumfahrt (DLR) - German Aerospace Center

Corporate Communications

Tel: +49 2203 601-3876

Fax: +49 2203 601-3249

E-Mail: Cordula.Tegen@dlr.de

Contact details for image and video enquiries as well as information regarding DLR's terms of use can be found on the DLR portal imprint.