SWOV ARTICLE





Photo: Peter de Graaff

European DRUID research into the use of alcohol, medicines and drugs in traffic completed 'Make the road user aware of the dangers caused by the combined use of alcohol and drugs'

A single joint or one beer: they do not necessarily lead to a considerably higher risk in traffic. But if these two stimulants are used together before driving, the crash rate can be 200 times higher. Also the combined use of different types of drugs is responsible for very high crash rates. These are findings of the European research project DRUID into the use of alcohol, medicines and drugs in traffic. SWOV was one of the participants in this large-scale project, the results of which were presented in Cologne, Germany, in September of this year. It was also investigated how legislation and enforcement can be used to fight the use of drugs in traffic. The conclusion: legislation as is being prepared in the Netherlands holds possibilities.

For a period of five years, the governments, research institutes and enforcement teams in thirteen EU countries have carried out research. How often have drivers in the EU used (too much) alcohol, drugs and/or medicines? How do the data in the EU countries relate? How dangerous is it? Is new legislation necessary and, if so, can this legislation be enforced? Are good testers available to the police? All these questions have now been answered.

Results for Europe

The map on the next page shows that the use of all psychoactive substances in Southern Europe

and Belgium is above the EU average. However, there are regional differences. In the Northern European countries the use of sleep medication and pain killers is higher than the European average, but alcohol and illicit drug use is lower. In the Southern European countries the use of illicit drugs, alcohol and the specific medicinal drug group benzodiazepines is higher than in the rest of Europe. The results also show that, although drivers from Eastern European countries have a certain reputation on alcohol use, the prevalence of alcohol (and other psychoactive substances) in these countries is relatively low. The reason may be that under communist rule these countries used very strict limits that were enforced equally strictly. It is highly possible that we can still see the effect of those days. In general, the use of psychoactive substances in Western Europe is on the European average.

The Netherlands: alcohol still the main problem

Drivers in the Netherlands do quite well compared to others: 'only' 0.7% of drivers in the Netherlands have consumed too much alcohol, whereas the EU average is 1.5%. Also, medicines, heroin and cocaine are used less in Dutch traffic than the EU average. But even though 0.7% seems very low, in practice this means that for as many as an estimated 20% of the road fatalities in the Netherlands alcohol has played a role; in 17% of the cases this involves the use of alcohol on its own and in 3% of the cases it is the combined use of alcohol and drugs. In the Netherlands, alcohol is therefore still number one among all psychoactive substances. It has also been found that



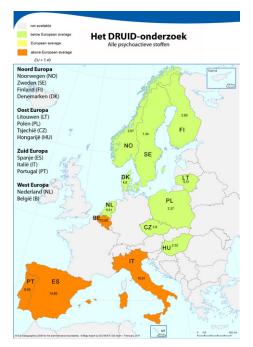
driving after having used cannabis or amphetamines is more frequent in the Netherlands than in the other EU countries.

Combinations: increased risk

The use of cannabis on its own only slightly increases the risk, comparable with a bloodalcohol content (BAC) of 0.1‰ to 0.5‰. Amphetamines are responsible for a much greater increase of the crash rate: 5 to 30 times higher. The same is the case for a BAC of 0.8‰ to 1.3‰. BACs of 1.3‰ or higher result in extremely large increases of the crash rate: from 20 to 200 times higher! For benzodiazepines and tranquillizers the risk increases by 2 to 10 times, which is comparable to a BAC of 0.5‰ á 0.8‰. The use of drugs combined with the use of another drug or with alcohol increases the risk of a serious crash by as much as up to 200 times. This is the case for combinations of hard drugs as well as for 'a joint and a beer'. The dangers of this latter combination are not generally known.

Drugs: legislation and enforcement

The DRUID project also investigated the practical use, reliability and cost-effectiveness of different saliva testers to establish drug use. Although the testers that were investigated could not trace all separate drugs in saliva, they were found to be suitable as a pre-selection tool: the saliva tester indicates whether or not a driver has used drugs; a blood test then needs to indicate how much has been used. It reminds one of the early years of alcohol tests using a breathalyser, which then needed to be followed by a detailed breath analysis at the police station. This was then found an acceptable way to start fighting the use of alcohol in traffic, while, at the same time, technical improvement of the detection and analysis apparatus continued. Besides enforcement, it would be good idea to give specific public information about the risks of - especially - the risks of the combined use of alcohol and drugs. All kinds of drugs, also the dangers, therefore, of 'a joint and a beer' and then part-icipating in traffic.



A total of nineteen EU countries cooperated in the DRUID research project, which began in 2006. The participants in the Netherlands were SWOV, Maastricht University, University of Groningen, Netherlands Organization for Applied Scientific Research TNO, Netherlands Forensic Institute, the National Police Services Agency and six police regions.

All results can be downloaded at <u>www.druid-project.eu</u>