REPORT: DRUG USE, IMPAIRED DRIVING AND TRAFFIC ACCIDENTS

Drug use, a growing challenge for EU road safety, says EU drugs agency

(11.12.2008 LISBON) As Europeans prepare for the festive season, the EU drugs agency (EMCDDA) releases today its latest report on drugs and driving. While alcohol remains the number one substance endangering lives on European roads, more drivers are now found to be using illicit drugs and psychoactive medicines, presenting a growing challenge for policy-makers. The report, Drug use, impaired driving and traffic accidents, a review of the latest research in this field, explores the potential impact on road safety. Concerns are expressed in the report over the prevalence of drivers under the influence of drugs on EU roads as well as the detection of a broader range of drugs. ‘The range of psychoactive substances available for illicit use today is widening’, says the report ‘and the latest studies which look for evidence of their use in drivers are indeed finding increased rates’.

The report is dedicated to the effects and risks associated with the use of individual substances or with multiple drug use. Among the substances covered are amphetamines, cannabis and cocaine as well as a range of synthetic drugs (ecstasy, GHB, ketamine, PCP). Also included are opioids (buprenorphine, fentanyl, heroin, methadone and morphine) and benzodiazepines (e.g. sedatives).

‘Preventing driving under the influence of drugs is targeted by the current EU drugs strategy 2005–12 and its action plans’, says EMCDDA Director Wolfgang Götz, ‘and policymakers are increasingly called upon to respond to the problems of road fatalities linked to licit and illicit substances. Determining the link between drug use, impaired driving and traffic accidents is a remarkably complex subject and a fast-moving area of research. With this report we aim to offer a precise overview of findings to date and an important signpost towards more effective solutions in the future’.

Measuring prevalence

Research covered in the report can be broadly split into two types: epidemiological and experimental. Epidemiological studies examine the prevalence of drugs in driving populations, and are conducted through a range of surveys (e.g. roadside, hospitals).

In Europe, the United States, Australia and Canada, around 1% to 2% of drivers stopped during roadside surveys tested positive for drugs in saliva. Higher prevalence levels of 6% to 12% were found in studies using urine samples.

Epidemiological studies assessing the prevalence of drugs, medicines and/or alcohol in drivers involved in a traffic accident (fatal or not) found that alcohol was more prevalent in this group than any other psychoactive substance. However, drugs were frequently found, and more often than in the general driving population. Cannabis and benzodiazepines generally compete for second place after alcohol.
Assessing risks

Experimental studies, where a drug is administered to volunteers in measured doses, help gauge potential risks through performance tests (e.g. assessing reaction times, visual skills); driving simulator exercises (e.g. testing braking ability); and real driving ‘tests’ on the road (e.g. monitoring deviation, speed). According to the report, experimental studies show that most illicit drugs can affect some aspect of driving performance and increase the risk of being involved in a traffic accident. And chronic (long-term) use of any illicit drug can decrease driving performance, even when the subject is no longer intoxicated.

Use of cannabis, GHB, ketamine and PCP was found to reduce the cognitive and psychomotor skills required to drive (e.g. motor control, perception, balance). Keeping a vehicle on track, for example, was the most difficult task for participants under the influence of cannabis due to the effects it has on body sway. When cannabis was combined with alcohol, the effects of both substances were prolonged and enhanced.

Negative effects produced by ecstasy use (MDMA) included increases in speed and speed variance and poorer ability to follow a car. Studies on long-term use of cocaine showed that the drug has negative effects on attention, problem-solving and perceptions of speed. Risk of accident was also higher when cocaine was combined with another psychoactive substance, such as alcohol and/or cannabis. Severe impairment can be expected with use of heroin (e.g. poor reaction time, right-left discrimination and perception of time).

The results of experimental studies also show obvious driving impairment with therapeutic drugs, whatever the class (benzodiazepines, antihistamines, antidepressants), although in all classes there are some that cause little or no impairment. Benzodiazepines generally have impairing effects, and often these are severe. Those on medication may be unaware of a drug’s effects on driving ability, underlining the need for those prescribing to take into account road safety issues and offer appropriate advice and guidance.

Developing research, meeting targets

At the start of the European road safety programme in 2003, it was estimated that over 40 000 people were dying on European roads every year, with alcohol responsible for around a quarter of these deaths. The programme set the ambitious target of halving the number of road deaths in Europe by the end of 2010 (3). The European Commission’s DRUID project (Driving under the influence of alcohol, drugs and medicines) provides scientific support to this policy target and is due to deliver results in 2010 (4). As part of an international expert group involving DRUID, the EMCDDA contributed in 2007 to guidelines for future research into drugs and driving aimed at standardising methods to allow for cross-country comparison globally (5).

Today’s report states that: ‘It is already clear that driving under the influence of illicit or medicinal drugs is not uncommon and can cause a substantial risk to traffic safety’. It also illustrates how drug-testing procedures continue to suffer accuracy concerns. For example the EU’s roadside testing assessment project, Rosita, considered no device currently reliable enough to be recommended for use in EU countries, despite technological advances in this area (6).

(1) The report (http://www.emcdda.europa.eu/publications/insights/driving) updates a 1999 EMCDDA literature review on the topic. Geographically broader than the first review, the report includes studies from Australia, Canada and the US. The scope of the substances examined is also wider. For a full range of EMCDDA products on drugs and driving, see http://www.emcdda.europa.eu/themes/driving
(2) Rates of use and testing times varied between countries. Also drugs can be detected in urine for a considerable time after use and do not necessarily mean that driving was impaired.
(4) A four-year €24m project launched in October 2006 and involving 21 European countries and 37 partners. See http://ec.europa.eu/transport/roadsafety/behavior/fitness_to_drive_en.htm
(5) See Drugnet Europe 57 and 60 http://www.emcdda.europa.eu/publications/drugnet
(6) Rosita, see http://www.rosita.org. Several EU Member States have passed laws to allow or define roadside testing (e.g. by saliva): Italy, Poland, UK (2003); Slovenia (2004); Czech Republic, Latvia, Austria (2005); Lithuania (2006); Portugal (2007), France (2008). In some countries draft laws await reliable test kits before enactment.

http://www.emcdda.europa.eu/publications/insights/driving — Summary available in 23 languages