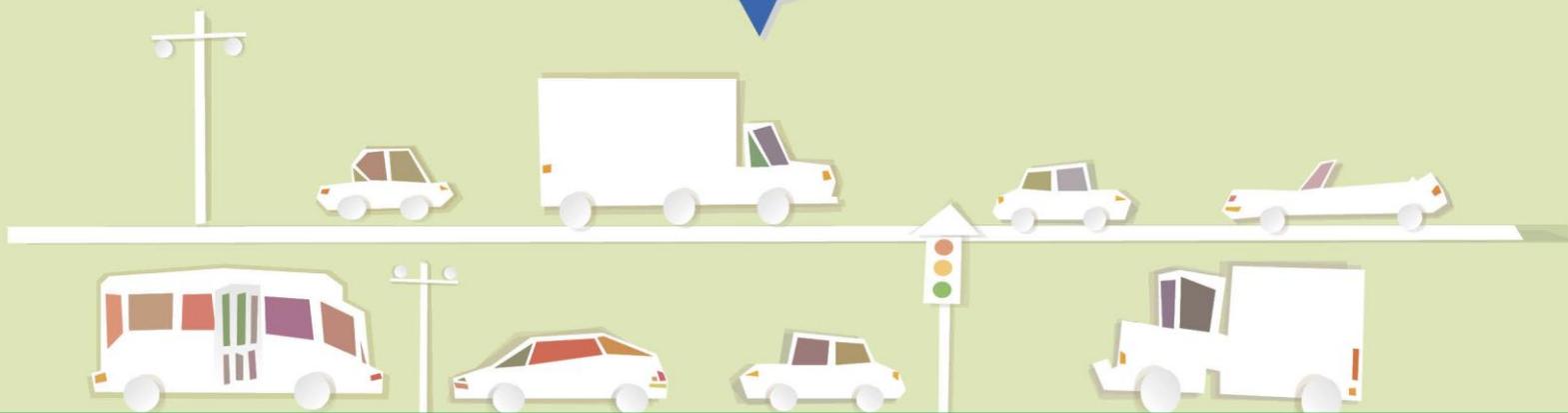


THEMATIC FILE ROAD SAFETY 13

ALCOHOL



Knowledge center
Road safety



Federal Public Service
Mobility and Transport

Thematic File Road Safety 13 – Alcohol (Summary)

Thematic File Road Safety 13 – Alcohol (2017)

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This thematic file provides an overview of the issues surrounding driving under the influence of alcohol. The focus is mainly on car drivers and the situation in Europe and Belgium.

Effects of driving under the influence of alcohol

Driving under the influence of alcohol is one of the main causes of a lack of safety on the road. Although only a small percentage of cars are driven by people under the influence of alcohol, the proportion of alcohol involvement is high when it comes to number of traffic accidents. In Belgium, approximately 1 car driver in every 10 (i.e. 10%) tests positive for alcohol after an accident where an injury is caused. Where there are serious injuries, that percentage rises to 40%. For this reason, driving under the influence of alcohol is a criminal offence in all European countries, although the standards applied differ from country to country. In many European countries (such as the Netherlands and Belgium) a blood alcohol concentration (BAC) of 0.5 g/l is the legal limit for drink driving. Above that limit, driving under the influence of alcohol becomes a criminal offence. Often for young/inexperienced or professional drivers a lower limit is applied (usually a BAC of 0.2 g/l). The intake of alcohol has various negative effects on a person's driving ability: inhibitions fall away, concentration is reduced, the car may lurch all over the road, reactions times increase, there is more variability in the car's speed and a certain form of drowsiness may occur. Drivers often think that although they are under the influence of alcohol, they can still drive properly. All of this has to do with drunk drivers over-estimating their capabilities.

Prevalence

Various research projects: ESRA (E-Survey of Road user's safety attitudes; self-declared behaviour; data-gathering: 2015-2016) and DRUID (Driving Under Influence of Drugs, Alcohol and Medicines; observed behaviour; data-gathering: 2007-2009) provide us with the most recent internationally comparable information about driving under the influence of alcohol. Although most drivers do not drive under the influence of alcohol, the ESRA survey (conducted in 25 countries) shows that 12% of drivers admit that they have driven at least once in the past months, with a blood alcohol concentration above the legal limit. In the DRUID roadside survey (in 13 countries) alcohol was detected in an average of 3.5% of European car drivers (BAC \geq 0.1 g/l), 1.5% tested positive for a BAC of \geq 0.5 g/l. In addition, 0.4% tested positive for a combination of alcohol (BAC \geq 0.1 g/l) and drugs or medication. Both studies show that the figures vary significantly between countries and that in all countries more men drive under the influence of alcohol than women. Also, all countries report that there is more driving under the influence of alcohol than under the influence of drugs or medication.

Accident risk

The risk of an accident occurring under the influence of alcohol is high. In Belgium, for example, 43% of seriously injured car drivers test positive for alcohol and the average BAC in these individuals is 1.6 g/l. From a BAC of 0.5 g/l upwards, the risk of an accident occurring increases exponentially. So, with a BAC of 0.5-0.8 g/l, the chance of a serious accident is 2 to 10 times higher, compared with a sober driver. With a BAC of 0.8-1.2 g/l, the risk is already 5 to 30 times greater, and with a BAC of 1.2 g/l or more, the risk of having an accident is 20 to 200 times higher. The severity of any injuries suffered is also often in proportion to the level of alcohol consumption. In general, accidents involving a person driving under the influence of alcohol have a more serious outcome. This has to do, among other things, with the greater risk behaviour found among people who drive under the influence and the reduced physical capabilities experienced by heavy drinkers.

There are two main risk groups when it comes to driving under the influence of alcohol. These are: men and heavy drinkers. Although young male drivers do not consume alcohol more often than older drivers (and sometimes even less often), they are still over-represented in the group of victims and drivers involved in alcohol-related accidents. They have a different pattern of consumption than older age groups (such as combining alcohol with drugs or binge-drinking). They are also affected more by alcohol and have less driving experience. Serious alcohol offenders are an additional risk group. They are responsible for around two-thirds of all alcohol-related accidents.

Belgian legislation and key figures

Belgian legislation forbids people to drive under the influence of alcohol starting from an alcohol concentration of 0.22 mg/l exhaled alveolar air (EAA: comparable to a BAC of 0.5 g/l). In Belgium, an exception is made for professional drivers. These drivers are breaking the law when they exceed an alcohol concentration of 0.09 mg/l EAA (comparable to a BAC of 0.2 g/l). Driving under the influence of alcohol can be punished by a fine, suspension of the person's driving licence, the requirement to undergo rehabilitation and, in repeated cases, a custodial sentence.

Since 2003, in Belgium, the percentage of drivers caught under the influence of alcohol has been between 2% and 3% (European average 3.5%). These percentages are higher in men at night (and are at their highest on nights at the weekend). They are also higher in Wallonia than in Flanders. In contrast with most European countries, no significant differences have been observed with regard to the age of drivers since 2015. Prior to that, the percentage of drivers under the influence was highest in the age group of 40 to 54-year-olds. It is estimated in Belgium that each year approximately 3600 drivers admitted to hospital after an accident test positive for one or more psychoactive substances. Most of these drivers test positive for alcohol (approximately 2500 drivers)¹.

Measures

Various measures are possible for reining back driving under the influence of alcohol. Applying clear, carefully considered legal alcohol limits is one. A legal blood alcohol concentration of 0.5 g/l appears to be a good limit, although it is important to use a lower limit for specific target groups. There is broad scientific consensus that for young, inexperienced drivers and for repeat offenders (recidivists) there should be "zero tolerance", which from a practical point of view comes down to a blood alcohol concentration of 0.2 g/l. In addition to using an alcohol limit, it is also important to enforce this limit properly. Because alcohol behind the wheel plays a role in a large number of traffic accidents, the fight against driving under the influence of alcohol should be one of the main priorities in maintaining and enforcing road safety. The more police checks are conducted into driving under the influence, the greater the perceived likelihood and the objective chance of being arrested. This can be supported by campaigns, such as the Bob designated-driver campaigns in Belgium and the Netherlands. Having a combination of enforcement, education and legislation is vitally important. In addition to awareness and enforcement, rehabilitation measures are also of great importance. The aim of rehabilitation courses for alcohol offenders is to prevent recidivism. These courses can focus on educational or psychological aspects and are designed to bring about a change in behaviour. A number of guidelines also need to be followed to ensure that the course is effective. For example, the sessions need to be spread over a number of weeks, the content and approach should be geared to the needs of the participant and a distinction needs to be made between specific groups, such as people with or without an addiction problem. The alcohol "interlock" can also play an important role in the rehabilitation process for people who drive under the influence. An alcohol "interlock", is an alcohol tester in the car that is linked to the engine's starting mechanism. This tester acts as an engine immobiliser. Only after a successful test (no alcohol detected) the car can be started. Various studies show that an alcohol "interlock" is more effective for offenders in preventing repeat offences than suspending their driving licence. The likelihood of relapsing and committing another alcohol-related offence falls by between 40 and 95% for as long as the device is installed in the vehicle. To achieve a long-term effect after installing an alcohol "interlock", the measure needs to be combined with an accompanying rehabilitation programme.

Finally

Taken in the long term, we need to keep carrying out scientific research into the problem of driving under the influence so that we can obtain a clearer grasp in relation to prevalence, epidemiological data and better strategies about driving under the influence of alcohol.

¹ We can assume that this is an under-estimation of the actual number of road traffic accident victims annually who test positive for alcohol, because the hospital data used to make this calculation is in itself a slight under-estimation of the total number of road accident victims.



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