

# DRUGS IN ROAD TRAFFIC IN AUSTRIA

A. Kaba, K. Danzer and S. Lehner

Austrian Road Safety Board, Vienna, Austria.

## Abstract

This article includes information about prevalence, legal situation, methods and results of enforcement and special treatment and rehabilitation programmes, which are provided, in Austria.

## Prevalence

Specific statistics about drug involvement in traffic accidents are not available in Austria. Statistics on convictions cannot separate alcohol involvement from that of other drugs. If Impairment is detected no more investigations will take place normally. Statistics regarding the number of cases in which drugs were found via police controls, blood sampling or traffic accidents are not provided (POMPIDOU Group, 1998).

The information about prevalence is only available by means of statistics in general. What we do not know exactly is the portion of people who use the car after taking drugs.

In Austria we find the highest intensity of alcohol consumption in the group of 30 to 50 year old male, the highest intensity of smoking in the age of 30 to 60 year old males and illegal drugs also males in the age of 25 to 30 years. On the other hand we can see the female in the age from 60 years on using legal psychotropic substances with highest intensity:

In statistic provided by the ministry of health we can see the usage of medicines is increasing in general.

- Medical Use and Road Safety in Austria, LESCH, 1986

226 Questions: For example: Which medicine do you use/ how often/ how much/ in the last three months?“

women 51%, men 36%

Analgesics	9,7 %
Cardiovascular therapy	6,9 %
Tranquilizer	2,5 %
Hypnotics	1,0 %
Other psycholeptics	0,3 - 0,6 %

≈ 50 % without driving license and ≈ 30 % with driving license uses medicine

There are no road side survey studies in Austria where we can find out that driving under impairment by drugs is increasing. But if we look into German studies (KRUEGER, 1995) and see the statistics of consumption on medicines we can come to the conclusion that the biggest problem is the impairment by alcohol, followed by medicines like benzodiazepines and the combination of both of them. The problem of drivers under the influence of illegal drugs is compared with the other very small.

With increasing age drug consumption rises at a disproportionate rate. 80 to 89-year-olds, for example, consume about 3,5 times as many packages of drugs as the average Austrian (19 packages). Schoolchildren (10 to 19 years) consume 4 packages per year. With the age of 50 to 59 27 packages are consumed per year, with 60 to 69 years 38 packages and with 70 to 79

years 54 packages are consumed. From 1992 to 1996 an increasing change of the most taken medicines could be shown for cardiovascular therapy (+25%) and for psychiatric drugs (+15%). The most prescribed medicines were antihypertensives (17,9%), cardiovascular therapy (10,8%), and psychiatric drugs (8,5%).

In an investigation from DANZER, (1999), could be shown that in special situations (change between monotonous and stressing situations) the regulation system of hypertrophic people with their medication is more stressed than that of healthy people. Therefore the reason is, that in situation where the critical blood pressure should increase for the possibility of a quick reaction, the medication impairs this process. If the blood pressure- and regulation system of hypertrophic people is impaired by their medication in special situations, they are not able to do well in a stress situation, because they can't reach the requested blood pressure.

So this study draw the attention to the fact to use medicine which improve cardiac capacity and get a better adaptation of the vascular system for hypertrophic people.

### **Legal Situation**

On 1.1.1998 Austria initiated legislation that superseded previous drug laws relating to narcotics, psychotropic substances and precursors (basic components or elements necessary for making drugs), the so called „Suchtmittelgesetz“ (Addict-Substances-Law). The former name was “Suchtgiftgesetz” (Addict-Poison-Law). This was also a signal towards liberalisation with the intention of making rehabilitation easier.

The new law provides a specific, independent regulation for psychotropic substances and precursors. The new regulation was developed after Austria accepted the United Nations Convention on Psychotropic Substances of 1971 and the subsequent UN Convention on Psychotropic Substances of 1988. The list of individual substances covered under the new legislation regarding narcotics and psychotropic substances is contained in the ordinances of the Ministry of Labour, Health and Social Affairs as, respectively, Ordinance on Narcotic Substances (Suchtgiftverordnung) and Ordinance on Psychotropic Substances (Psychotropenverordnung).

The respective dangers of the three substance classes – narcotics, psychotropic substances and precursors – are reflected in the level of punishment assigned to each class. If small quantities of a medication containing a psychotropic substance are found and are presumed to be for personal use only (i.e. used as medication), no punishment follows. Additionally, cases involving narcotics and psychotropic substances not contained in any medication can also be dismissed by prosecutors if it can be shown that the small quantity is for personal use only. In such cases, either the courts or the prosecutor can dismiss the case for two years on condition that the offender receives medical therapy, if indicated. At the end of two years, the case is reviewed in terms of the success of the medical therapy. If the offender has not completed the therapy and/or if the offender has committed a new offence during the two-year period, the case will be prosecuted.

Austrian drug law is based on the principle that each person is free to inflict harm upon himself and that therefore prosecution for consumption only does not exist. Consumers, however, are prosecuted because of the wide interpretation of „possession“. That is, possession can include what a person hold in his or her hand as an indication not only of consumption but also of presumed previous possession. Thus, the decriminalisation of drug consumption in Austria can be shown to differ in a legal context from the criminality of drug possession.

These regulations are to be seen independent of impaired driving. But if the sentence is prosecuted there is an impact to the license. The driving license will be withdrawn unless the reliability is given again. This process is executed by different authorities. So sometimes the license is withdrawn years later. When this takes place within a rehabilitation programme a

big problem is given. Suspension and regaining the driver license is anchored in §§ 24ff of License Act (Führerscheinggesetz, FSG).

Regarding alcohol, impairment is assumed to exist at 0,5‰ blood alcohol concentration (BAC) with consequences depending on the level of alcohol. Regarding drugs, no legal limit exists. However, if drugs and/or alcohol are involved in an accident, the sanctions are more severe. But only illegality of drugs will lead to punishment (POMPIDOU Group 1998).

In Austria an individual driver can be tested for the presence of psychotropic drugs other than alcohol only if there is sufficient behavioural reason to do so. There are no test procedures for roadside tests. So the person under strong suspicion for drug consumption has to be taken to a physician in a police-station or a hospital to take a clinical test. This test has to be taken by a special educated medical doctor with a license from the authorities.

Every individual driver without any suspicion can be tested (breath testing) concerning alcohol. Blood samples are only allowed to be taken, if the driver is suspected of being impaired by either alcohol or drugs, but the sample may not be taken by force or when the driver is unconscious or dead. Blood samples can only be screened for alcohol with the donor's permission or tests can be conducted to detect other drugs. So the protection of the individual is more important than that of the society.

Urine tests are taken by police as a method of enforcement when suspicion for drugs is given (HRB, E.M.C.D.D.A., Feb.99).

Endangerment of a person by drink- or drug-driving is subject to sanctions as established by the section of the Penal Code (§89) that addresses traffic-specific regulations relating to concrete dangers caused by drink- or drug impaired drivers.

Any offence according to selling, possessing or consuming is anchored in §§ 27-32 SMG. Legal consequences for drug consumption in road traffic will be punished according to Road Traffic Act (Straßenverkehrsordnung; StVO) § 5 and §99 and According to Penal Code § 81, § 88 and § 89.

The Austrian drug policy aspires to a balance of measures of prevention, treatment, rehabilitation and risk minimising addiction accompanying criminal repression. The highest principle should be taking precedence of help for addictive persons instead of punishment.

### **Methods of Enforcement**

The legal situation does not make enforcement easy. But Road Traffic Act (StVO) prohibits steering a car while under drug influence.

Police have the power to stop a driver during a routine control, even when the driver is not behaving suspiciously. The control allows examination of the persons' fitness to drive and the safety of the vehicle. These powers are regulated in the Road Traffic Act (StVO) as well as in the Police Security Act (Sicherheitsgesetz) (POMPIDOU Group 1998). [The extent of police stops is largely under local control in large communities and cities. Smaller communities tend to have fewer controls by local police because of the more familiar relationship of the police to the population. Thus, the authorities in larger jurisdictions will conduct police controls in smaller communities, thereby avoiding the involvement of local police in potentially long-term difficulties between drivers and themselves.]

There are different possibilities of drug tests, which are currently used by the police in Austria. The mostly used tests are, for example:

- Druglap Multi 10 (DIPRO)

Step-by-step-System-Stripes for urine testing to look for Amphetamine/Metamphetamine (Ecstasy), Cocaine, Opiates (Heroin, Morphium), THC (Cannabinoids), Methadone, Barbiturates, Benzodiazepines, Phenycycline (PCP) and tricyclic Antidepressants.

- ONTRAC-Testcup (ROCHE Diagnostics) with integrated testing strips
- Frontline (ROCHE Diagnostics)

Teststrips with two compartments.

- Adx-System Druganalyzer (ABBOTT)

A full-automatical system, which has a very high precision to recognize drugs in low concentration (Cut-off-Sector). The test menu includes urine testings, looking for Amphetamin/Metamphetamin, Barbiturates, Benzodiazepines, Cannabinoids, Cocain Metabolite, Methadone, Opiates, Phenycyclidin (PCP) Propoxyphen. It also includes serum-testings, searching for Salicylat, Acetaminophen/Paracetamol, Äthanol, tricyclic Antidepressants, Benzodiazepines, Barbiturates and Cotinin.

There is a current investigation called „Illegale Drogen und Medikamente“ done by Dr. FOUS and Dr. SAURMA in 1998, which describes the situation in Vienna/Austria. The goal was to have an estimation of the number of drug influenced drivers in Vienna. The study is based on a checklist where factors of impairment are to be checked. Special educated policemen take notes about drugs, medicines, alcohol as well as medical factors like pulse rate, blood pressure, temperature of skin and dates of the driving license and sociodemographic dates. This was followed by a clinical test where symptoms of addiction, abuse or consumption of drugs were carried out. They focussed their attention to unexpected sweat or other reactions, dilation and reaction of pupils, took visual tests, watched their behaviour in general and especially their answers and the way how they speak.

The clinical test includes an urine test to investigate for illegal drugs (Cannabis, Opiates, Cocaine, Amphetamines and Methadone) as well as Benzodiazepines and Barbiturates. During a period of one month (October 1997) police enforcement conducted 546 suspicious drivers. 76 of them were suspected for drugs and 28 of them gave a positive result using urine test stripes. This is a portion of 5.1%. 73 of the 546 drivers were positive for alcohol after breath testing. This are 13,4%. If we compare these figures with the figures of Vienna as a whole we can estimate that the relation between alcohol positive drivers to drug positive drivers is 2.6 to 1. It will be supposed that one of 20 drivers will be under influence of drugs. The detection of evidence of single drugs was difficult since many tested persons had taken several different kinds of drugs (FOUS & SAURMA, 1998).

The DROMEKO-project (BATTISTA, HOFFMANN, UHL, SPRINGER et al, 1998) deals with two additive parts. In the first part a list of illegal and legal drugs and the effect of combined drugs was created. ("DROMEKO"-list). In the second part researchers worked out an instrument to allow recognition of drug impaired people on the road. It should be taken as a training for executive.

The DROMEKO list gives an exact description of all preparations which are in the trade, their effects also with other drugs combined, period of effectiveness, kind of impairment and pharmacocinetic. This data bank is based on existing data and international literature. It contains the size of the preparations circulation and in the near future the number of saled units.

### **Prevention/Rehabilitation Programmes**

Illicit drugs are not an issue that is discussed much in public. There are different political opinions but discussion is quite modest. But the most relevant point is to make people conscious of the drug problem in road traffic and enlighten youth on its consumption.

For a long time Austria has not engaged in drug prevention programs and, for lack of epidemiological information, does not recognise a significant drug-driving problem.

However, therapeutical and psychological countermeasures are offered by the KfV (Austrian Road Safety Board), to address the presumed problem of drugs-and-driving. For future prevention drugs prevention programmes are designed for presentation in schools and discotheques.

As a basis of the second part of the project chemical analysis of existing blood/urine and saliva tests, experiences of psychological traffic tests, findings of short medical/psychological tests for exploration on the road side and knowledge of electronic measurement of Nystagmus were used.

Special results of that part:

-the combination of drugs and alcohol prescribes highest accident risk and changes the profile of effects of medicines.

-Methadone substitution therapy allows in most cases to retain driver ability. Precondition for that is to attend a substitution therapy with methadone for more than one year, to live under stable psychological circumstances and enough readiness to adapt behaviour, ability for social integration and prohibition of additive psychotropic substances or alcohol.

-Medicines need not have negative influence on driver ability. Some medicine groups have a positive effect on driver ability and as a consequence in road safety. Problematic aspects have to be remarked in the abuse application of medicines with regard to road safety especially in the abuse of combined substances.

-During the period of adjustment to opium as a medical treatment but also in the phase of curing of addiction driver ability and road safety cannot be assumed. Editors of the study describe differences in attitude and consciousness between persons who need opium for health reasons and others who have no medical indication. Limits of drugs are very difficult to decide because of their difference of effects on driving ability.

Dealing with drug-drive offenders: In most cases participants of driver improvement courses will be assigned because of an alcohol offence (<1,2‰). If their behaviour is conspicuous referring to drug abuse it has to be clarified whether it could be led back to a first test behaviour (irregularity) or a manifest addiction. Individual conversations will clear up whether persons are able to attend a driver improvement course or whether they should go to a psychological counselling or drug rehabilitation. It exists a Driver Improvement course with special model for drug conspicuous persons to learn differentiating drug consumption and driving. Experiences with drug abuse and assignments to courses (not a legal basis according to the new law of driving license) are confined to individual cases in Austria. Performance of "Driver aptitude test": It allows prognosis of traffic behaviour in future (FSG §§ 7, 8, 24). Rehabilitation of abuse and addicts drug misuses who hold driving licences (or did so prior to the conviction)? It is necessary to differentiate between consumption of drugs, abuse and addiction. Rehabilitation is very important under aspects of increasing drivers traffic adjustment because it cannot be expected that only removal of driving license will be effective in drivers responsibility and reliability. The importance of getting back driver license to organise personal circumstances of normal life (job,...) should not be underestimated.

Reintegration study (MINISTRY OF HEALTH, PRESSLICH, OPGENOORTH, ASCHAUER-TREIBER, BALDASZTI, WILLINGER, 1990) (unpublished): They were engaged in a programme which offered substitution therapy with Methadone to opiate addicted persons. One important background is to allow opiate addicted people keeping their driving license under special circumstances of optimal medication, potential additive medication and periodical urine tests. Additional consumption is not allowed. In their opinion methadone seems to be a qualified psychopharmacological therapy which supports peoples productiveness, especially in the case of keeping driving abilities. She indicates disorders of personality, like depressive or phobic symptoms, organic psychosyndromes as a typical characteristic of opiate addictive persons. As a consequence it is necessary to take all such side effects into consideration for a decision of retaining driver license. (apart from information already provided to the group).

With the increasing number of drug consumption of drivers a special driver improvement programme was developed (SPOERER&RUBY, 1996). In the course problems of consuming drugs, healthiness, responsibility by driving a car, lifestyle, strategies for avoiding drug consumption in future and so on will be discussed. During the time of the driver improvement course the participants must not use drugs and there were also urine tests taken without an appointment. An investigation of drug impaired drivers in comparison with alcohol impaired drivers of the Forensic-Medicine Institute of the university of Salzburg turned out, that cannabis has still an effect of driving ability after non-consuming drugs for longer times. In comparison alcohol impaired drivers show that kind of impaired driving ability when the abuse of alcohol was for a longer period.

In the Driver Improvement courses could be shown, that drug impaired drivers showed the same lifestyle like alcohol impaired drivers, for example smoking for satisfying curiosity. They also have problem to negate (say no).

A driver improvement course for people with drug problems has not only the effect for getting back the driving licence, it also has a therapeutical and psychological effect in general health service.

### **Unpublished Investigation**

1. Battista H J, Hoffmann O, Uhl A, Springer A. Illegale Drogen und Medikamente – Absolute Fahrtauglichkeit und mögliche Beeinträchtigung der Fahrtauglichkeit (Projektteil 1 – DROMEKO-Liste). 1998
2. Fous R, Saurma W. Illegale Drogen und Medikamente – Absolute Fahrtauglichkeit und mögliche Beeinträchtigung der Fahrtauglichkeit (Projektteil 2). 1998.
3. Presslich O, Opgenoorth E, Aschauer-Treiber G, Baldaszi E, Willinger U. Methadon und Fahrtauglichkeit. 1990.

### **Journal Articles**

4. Lesch OM et.al. Medikamentengebrauch und Verkehrssicherheit in Österreich. Zeitschrift für Verkehrsrecht, H6. 1986; pp 161-166

### **Entired Book**

5. Krüger. Das Unfallrisiko unter Alkohol. Gustav Fischer Verlag, Stuttgart, 1995.

### **Book Chapter**

6. Spoerer E, Ruby MM. Zurück ans Steuer – Theorie und Praxis der Rehabilitation auffälliger Kraftfahrer. In: Faktor Mensch im Verkehr (editor), Rot-Gelb-Grün Verlag Braunschweig, 1996, pp 73-77.

### **Conference Paper**

7. Gemell C, Moran R, Crowley J, Courtney R, Wiessing L. European Monitoring Centre for Drugs and Drug Addiction. Literature Review on the Relating between Drug Use, Impaired Driving and Traffic Accidents. (CT.97.EP.14) Lisbon: EMCDDA, February 1999
8. Krüger H-P, Perrine MWB, Mettke M, Huessy F. Council of Europe. Co-operation Group to Combat Drug Abuse and Illicit Trafficking in Drugs (Pompidou-Group). Illicit Drugs in Road Traffic – Overview of the Legal Provisions, Difficulties Faced by Police, and Analysis of Prevention Attempts in Selected European Countries. Strasbourg, January 1999. P-PG/Circrout (98)4. P-PG/Circrout (98)5.

### **Thesis/Dissertation**

9. Danzer K. Der Einfluß von Anti-Hypertensiva auf psychische Anforderungen im Straßenverkehr, thesis, Universität Wien, 1999