

DRUG DRIVING EXPERT TECHNICAL PANEL

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THE RESPONSE TO NORTH REPORT

Agreed to implement recommendations from the North review

Government's 2011 Framework for Road safety

“...We will explore the case for introducing an offence of having a specified drug in the body while driving, in addition to the current offence of driving whilst impaired by drugs.....”

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TERMS OF REFERENCE

To discern which compounds from the following list should form part of the statutory instrument related to a specific offence of driving whilst under the influence of drugs:

Amphetamine-type;
Benzodiazepines and hypnotics;
Cannabinoids (natural and synthetic);
Cocaine (including salt and crystalline forms);
Hallucinogens;
Opioids (natural and synthetic)
Other substances if the group considers they have a similar and significant presence in the population

TERMS OF REFERENCE

1. To consider different sources of evidence to help to establish the **degree of risk** associated with specific drugs **in relation to road safety**
2. To establish whether it is possible to identify for average members of the adult population concentrations of the drugs identified (1a – 1g above) that would have an impairment effect **broadly equivalent to a blood alcohol content (BAC) of 80mg / 100ml**
3. To establish whether in some specific circumstances different concentrations of these drugs (**broadly equivalent to a blood alcohol content (BAC) of 50mg/100ml and 20mg/100ml, zero**) may be deemed necessary for road safety

TERMS OF REFERENCE

1. To consider in cases where such concentrations can be identified, for an average member of the adult population the **degree of variability** across the population, including for habitual users of these substances;
2. To establish the likelihood of whether these concentrations would be **exceeded through prescribed or otherwise legally obtained drugs** (as distinct from illicit drugs);
3. To consider the evidence relating to **poly-substance use**, such as the interactions between the drugs listed **and alcohol** in order to determine the effects of such interactions and the prevalence of impairment (risk in relation to road safety) due to such causes; and
4. To report on all of the above to the Secretary of State

KEPT INFORMED ABOUT BUT NOT RESPONSIBLE FOR:

- Recommendations about the device(s) to be used at roadside or in the police station
 - ‘Type-approval’ - drug testing devices
 - Centre for Applied Science and Technology (CAST), led by Home Office
- Procedures related to police enforcement of legislation
 - Responsibility of the **Association of Chief Police Officers (ACPO)** and the Home Office
- Implementation of the legislation and drug driving policy
 - Separate policy group

AN IMPORTANT DISTINCTION

- ❑ It is important to clarify that the relationship between drug use and driving is different from our drug possession laws
- ❑ Legislation in the UK differentiates drug and traffic policy
- ❑ The panel is concerned with the latter

LEVEL OF RISK RATHER THAN IMPAIRMENT

Our APPROACH did not seek to define, measure or proportion a drug level to a certain degree of impairment

- ❑ **Legislation already in place for driving whilst impaired**
 - ❑ **Section 4 of the Road Traffic Act 1988 of driving while unfit due to drugs**
- ❑ **In terms of our ToR defining impairment for different classes of drugs too difficult**
- ❑ **Impairment differs for different classes of drugs (stimulants Vs depressants Vs hallucinogens)**
- ❑ **There is no universal agreement on how to measure impairment**

METHODOLOGY 1:

The approach that we have used involved several types of evidence

- **Consideration of the epidemiological evidence**
 - Establish which drugs are prevalent in general population
 - Establish level of use of illicit drugs and psychoactive medicines by driving population
 - Drugs cited in Misuse Drugs Act 1971

EPIDEMIOLOGY

- ❑ **Prevalence of illicit drug use in general population**
 - ❑ EMCDDA which estimates numbers of users of different drugs across EU per year
 - ❑ BCS – trends drug use 16-59 year olds since 1996
 - ❑ Mixmag surveys recreational drug use in UK
- ❑ **Prevalence of illicit drug use in general driving population**
 - ❑ DRUID: Driving Under the Influence of Drugs, Alcohol and Medicines, 6th Framework Programme, Set up by EU Commission to increase road safety and DRUID consortium composed total 37 partners from 19 States
 - ❑ Scottish Executive Social Research (SESR)
 - ❑ British Crime Survey driving Q for 2011 (Crime Survey for England & Wales)

METHODOLOGY 2:

Drug Driving Legislation in Other Countries

- Comparison of procedures in place for EU countries (which drugs, thresholds and sanctions)
- Drug driving legislation in Norway
- Netherlands Forensic Institute work on Drug driving legislation

Guidance provided by different organisations

- ICADTS (International Council on Alcohol, Drugs and Traffic)
- National Clinical Guidelines for drug dependence
- DVLA 'At a Glance' document (Diabetes etc)

METHODOLOGY 3:

○ Consideration of the scientific evidence

Drug Driving Literature

- Identify the **risk estimates (Odds Ratios)** from single and combined use of psychoactive substances when driving in relation to driver safety

We considered ORs for:

- Roadside survey's of driving population apprehended for suspected drug driving/impaired driving and RTAs
- From hospital studies (seriously injured and killed drivers)
- Case control studies
- Meta-analysis of the above drug driving evidence

SCIENTIFIC EVIDENCE FOR RISK

For instance we considered Odds Ratios (that estimate risk) from DRUID.

- DRUID calculated the risk of being seriously injured or killed in a RTA
- Based on control data from roadside surveys, case data from hospital studies and from studies on killed drivers.
- The OR were adjusted for age and gender
- Controls were weighted with the traffic distribution .

METHODOLOGY 4:

Contextual evidence

- Blood drug concentration data (DVLA and FSS etc) from drug drivers
- Transport Research Laboratory (DfT, Safety statistics)
- Known PK, PD for drugs, therapeutic and toxic blood concentration data
- If available: Blood drug concentration data equivalent to the legal limit for drivers at 80 mg of alcohol per 100 ml of blood
- If available: Blood drug concentration data equivalent to 50 mg and/or 20 mg of alcohol per 100 ml of blood

PREVALENCE OF DRUGS

Alcohol most common

Cannabis

Cocaine

Amphetamine-type

Prescribed licenced drugs

Benzodiazepines and Z-drugs

Medicinal opioids

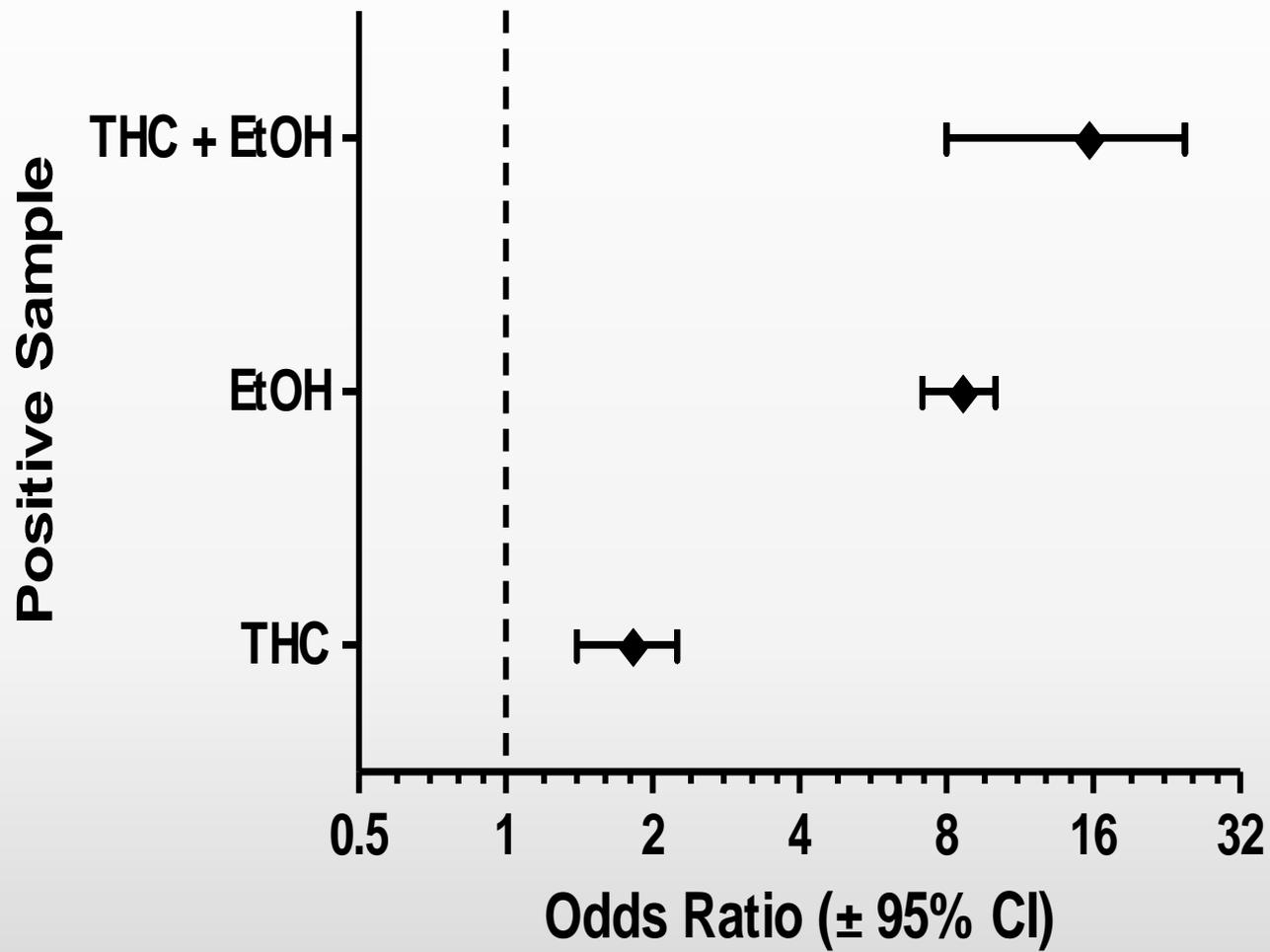
Opiates, illicit opiates

Hallucinogens (Ketamine, LSD, GBL, GHB)

NO SURPRISES

CANNABIS

- THC the psychoactive component
- Cannabis use **doubles (or triples)** risk of driver involvement in RTA.
- The majority of drugs used in combination with other psychoactive drugs (usually alcohol)
- Indeed the risk of a driving accident was **increased 16 fold** when cannabis and alcohol were consumed concurrently by drivers
- Possible need to look at alcohol in combination with cannabis



COCAINE

Substance	OR	CI	Basis of the OR
Cocaine	2.96 (p<0.05)	1.18 - 7.38	Meta analysis of 4 studies analysing presence of cocaine in drivers fatally injured in road crashes
Cocaine	3.3	1.40 - 7.79	Analysis of blood samples collected from individuals seriously injured in RTAs in 6 European countries between 2007-2009
Cocaine	2.04	0.69 - 6.09	Dutch Case-control study comparing 110 drivers hospitalised after a RTA

AMPHETAMINE

- Although amphetamine less prevalent ORs are higher for risk of RTA following consumption than either cannabis or cocaine
- **Amphetamine** 4.46 (p<0.05) 2.21 - 9.00 Meta analysis of 8 laboratory studies analysing presence of amphetamines in drivers fatally injured in road crashes
- **Methamphetamine** 8.88 (p<0.001) 4.54 - 17.39 Case control study (Thailand) comparing urine

PRESCRIBED MEDICATION

- Difficult conceptually since involves different user groups
- Those who legitimately use licensed psychoactive medication
 - If compliant have medical defence
- Those prescribed psychoactive medication for treatment drug/alcohol dependence
 - DVLA allows those on supervised maintenance to hold license pending medical assessments
- Those who misuse prescribed psychoactive medicines
- Those who use prescribed psychoactive for recreational purposes
- Those who consume other psychoactive drugs with their medication

THE MEDICINES AND HEALTHCARE PRODUCTS REGULATORY AGENCY (MHRA)

- Panel working closely with MHRA an executive agency DoH and with Commission for Human Medicines (CHM)
 - MHRA and CHM act within Medicines Act 1968 and European Union legislation to regulate safety, quality and efficacy of medicinal products
- Provide advice to the Licensing Authority on all matters relating to medicines.
- Provide advice about driving whilst on medications via medical information leaflets
- Member of CHM on the panel

MEDICAL DEFENCE

- Drugs proscribed for driving can be used legitimately, in accordance with medical advice (morphine for chronic pain or diazepam for anxiety).
- Panel recognises may be more dangerous for a person to drive not having taken their prescribed medication than driving having taken it.
- Our recommendations will not affect those who are properly and safely taking medically prescribed drugs and driving in accordance with medical advice, and for whom, there is no evidence of driving in an unsafe way.
- **A statutory defence will be available** for a driver who has taken a drug supplied or prescribed for medical purposes and who has taken the drug in line with directions and instructions. (This is included in Clause 27 of the Crime and Courts Bill).

HOWEVER.....

“Properly and safely taking medically prescribed drugs and driving in accordance with medical advice”

- Adherence to medical advice is sometimes variable
- Adherence to advice given regarding alcohol particularly important
- Leaflets supplied with medication may not be clear enough
 - “Do not drive if feeling drowsy”
- In light of scientific evidence with regard to driving and prescribed medications advice may need to reviewed

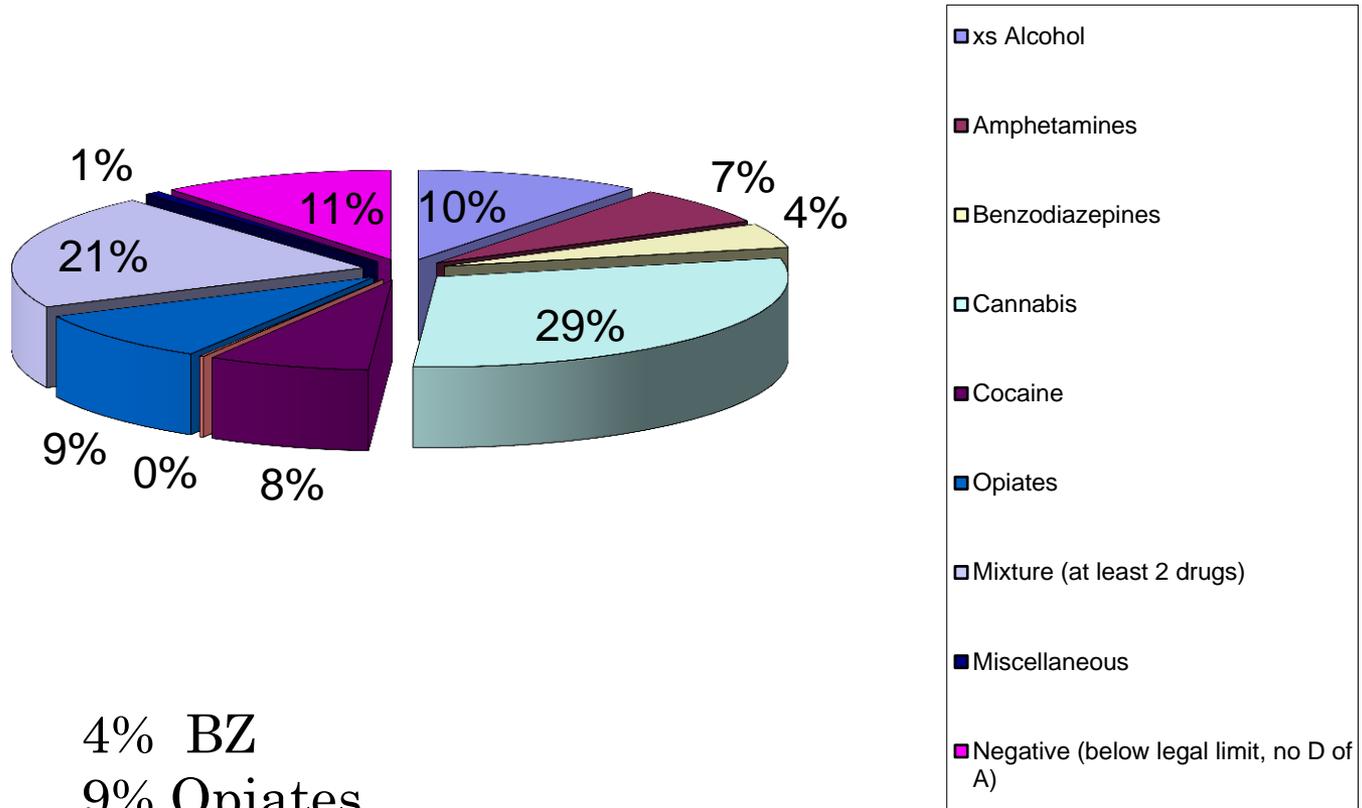
PRESCRIBED MEDICATION

Opiates, Opioids, Medicinal opioids

- Odds individuals being **seriously injured** in road accidents in 6 European countries between 2007-2009 when consumed **Illicit opiates**
2.47 (0.50 - 12.10)
- Odds individuals being **killed** in road accidents in 4 European countries between 2007-2009 who consumed **Illicit opiates**
10.04 (2.04 - 49.32)
- Odds individuals being **seriously injured** in road accidents in 6 European countries who consumed **Medicinal opioids**
9.06 (6.40 - 12.83)
- Odds individuals being **killed** in road accidents in 4 European countries between 2007-2009 who consumed **Medicinal opioids**
4.82 (2.60 - 8.93)

BRITISH CONTEXT: Cases submitted to DUID unit in Chorley 2004-2007 where drivers suspected of driving under influence of drugs

FSS Drug Driving Unit 2004 - 2006



PRESCRIBED MEDICATION

BENZODIAZEPINES AND Z-DRUGS

Impairment in apprehended drivers in Norway *Adjusted for all background variables Bramness et al, 2002

Oxazepam (OR: 3.65 (n=73; P <0.05)
Flunitrazepam	OR: 4.11 (n=211;(P <0.05)

UK study, Tayside police 19, 386 drivers involved first RTA:
Barbone et al Lancet, 1998

Zopiclone alone	OR: 4.00 (1.31 – 12.2)
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Any BZ with positive breath test	OR; 8.15 (2.06-32.34)
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Benzodiazepine/driving collaboration group.

BZ and Alcohol	OR: 2.00 (alcohol alone 0.2-0.8g/L)
	OR: 7.00 (alcohol >0.2g/L + BZ)

PRESCRIBED MEDICATION

Opiates, Opioids, Medicinal opioids, illicit opiates

- Acknowledged in Europe that opiates/opioids increases risk RTA between 2-10 times
- Medicinal opioids seem to have higher risk
- BZ used more in the UK than in Europe by driving population
- 2-5 times risk RTA
- **ANY opiate/opioid or BZ with any amount of alcohol significantly increases risk of RTA**

ALCOHOL AND DRUG USE

- Significant risk with multiple drug use
- Alcohol use multiplies risk
- How do we deal with this?

Evidence of risk for Alcohol and drugs combined
DRUID

- OR seriously injured RTA **31.97** (20.76-49.25)

THANK YOU

ANY QUESTIONS