Between the Lines - Volume 13, Number 2, 2004

Update on Drug-Impaired Driving

The National Highway Traffic Safety Administration announces its publication of Drugs and Human Performance Fact Sheets. The Fact Sheets, compilations of facts on 16 of the most commonly used/abused drugs, are a result of the deliberations of the International Consultative Panel on Drugs and Driving Impairment held in Seattle, WA, in August 2000. The National Safety Council (Committee on Alcohol and other Drugs), the State of Washington Traffic Safety Commission, and the National Highway Traffic Safety Administration (NHTSA) sponsored this meeting.

The panel of international experts on drug-impaired driving reviewed developments in the field of drugs and human performance over the last 10 years; identified specific effects that both illicit and prescription drugs have on driving; and developed guidance for others when dealing with drug-impaired driving problems.

The expert panel selected 16 drugs for review including over-the-counter medications, prescription drugs, and illicit and/or abused drugs. The selected drugs were:

- Carisoprodol (soma®)
- Cocaine
- Dextromethorphan (e.g.
- Robitussin®)
- Diazepam (Valium®);
- Diphenhydramine (e.g. Benadryl®)
- Gammahydroxybutyrate (GHB)
- Ketamine (Special K)
- Lysergic acid diethylamide (LSD)
- Marijuana
- Methadone
- Methamphetamine/amphetamine
- Methylenedioxymethamphetamine
- (MDMA/ecstasy)
- Morphine/heroin
- Phencyclidine (PCP)
- Toluene
- Zolpidem (Ambien)

Each individual Drug Fact Sheet covers information regarding drug chemistry, medical and dosage information, pharmacology, drug effects, effects on driving, the role of the Drug Recognition Expert (DRE), and classification of driving risks. Each Drug Fact Sheet also includes a list of key references and recommended reading for further information.

The following data are uniform to all of the Drug Fact Sheets.

Drug Chemistry

- Physical description
- Pharmaceutical or illicit source
- Synonyms

Medical and Dosage Information

- Drug class

- Potency and purity
- Typical routes of administration
- Medical and recreational uses
- Recommended and abused doses

Pharmacology

- Pharmacodynamics (mechanism of drug action, major receptor sites)
- Pharmacokinetics (drug absorption, metabolism, and climation)
- Blood and urine concentrations

Drug Effects

- Psychological and physiological effects
- Duration of effects
- Withdrawal effects
- Side effects
- Drug tolerance and dependence
- Drug interactions

Effects on Driving

- Performance effects (clinical and laboratory)
- Driving simulator studies
- Epidemiology studies

Drug Recognition Expert (DRE)

- DRE category
- Typical DRE profile

Classification of driving risks

- General conclusions

References

- Key references and recommended reading

Limitations of the Fact Sheet

One of the main limitations of the Drug Fact Sheets is that they primarily relate to single drug use. As prosecutors know, too often the suspect or defendant in any particular case has consumed more than one drug during the same time frame. Prosecutors must also keep in mind that other factors influence the risk of effects on driving for any drug, including: the dose, the dosage frequency, acute and residual effects, chronic administration, route of administration, the concentration of the drug at the site of action, idiosyncrasies of metabolism, drug tolerance or hypersensitivity, and the combined effects of the drug with other drugs and/or alcohol.

How to Order

To order Drugs and Human Performance Fact Sheet, write to the Office of Research and Technology, NHTSA, NTI-130, 400 Seventh Street, S.W., Washington, DC 20590 or download from the website at http://www.nhtsa.dot.gov/people/injury/research/job185drugs/introduction.htm.

Toxicology Meeting Held in Seattle

The National Safety Council and the National Highway Traffic Safety Administration co-sponsored a two-day meeting May 24-25, 2004, in Seattle, WA, to discuss improving the relationships between Drug Recognition Experts (DREs), toxicologists and prosecutors to better prepare for drug-impaired driving cases. The meeting was chaired by Dr. Barry Logan, Ph.D., DABFT, director of the Washington State Forensic Laboratory Services Bureau. Attendees included prosecutors, DRE instructors, representatives from the International Association of Chiefs of Police (IACP) and toxicologists from several states, including Arizona, Colorado, Florida, New Mexico, and Nevada.

This meeting identified “best practices” to enhance interactions among the three groups with the ultimate goal of creatinga Model Program adaptable to all jurisdictions. The Model Program will include laboratory guidelines for testing procedures; law enforcement protocols for the most effective utilization of DREs; prosecutor training in the use of DREs and toxicology reports in impaired driving cases; and strategies to enhance communication between these groups to improve case preparation and presentation.

A draft report is expected by mid-summer and a final report by fall 2004. The completed report will be available on the NTLC Web site at www.ndaa-apri.org.