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Working to Reform Marijuana Laws

**You Are Going Directly To Jail (Updated)**

**DUID Legislation: What It Means, Who's Behind It,  
and Strategies to Prevent It**

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There's a new front in the "War on Drugs" and its name is DUID.

DUID, short for "driving under the influence of drugs," is the latest buzzword among politicians and police -- however, in this case, words can be deceiving.

Though billed<sup>[1]</sup> by its proponents as a necessary tool to crack down on persons who operate a motor vehicle while impaired by illicit drugs, in reality, many newly proposed DUID laws -- in particular "zero tolerance" *per se* laws -- have little to do with promoting public safety or identifying motorists who drive while intoxicated. Rather, these laws potentially classify many sober drivers as impaired under the law solely because they were presumed to have consumed a controlled substance -- particularly marijuana -- at some previous, unspecified point in time.

### DUID Defined

There are various types of DUID laws, some more pernicious than others. Today, every state has DUID legislation on the books. These laws fall into three distinct categories:

#### Effect-Based DUID Laws

Most state DUID laws are "effect based" laws. This legislation forbids drivers to operate a motor vehicle if they are either "under the influence" of a controlled substance, or if they have been rendered "incapable of driving safely" because of their use of an illicit drug. In order for a defendant to be convicted under this statute, a prosecutor must prove that the driver's observed impairment and/or incapacity was directly associated with the ingestion of an illicit substance. To do so, prosecutors typically rely on evidence gathered by law enforcement officers at the scene of an accident (i.e., a driver's performance during a field sobriety test, evidence that the motorist was driving at an excessive speed, etc.), testimony from a Drug Recognition Expert (DRE), and/or a positive result on a toxicological exam indicating recent consumption of a controlled substance. For the most part, this is a multidisciplinary standard that focuses on the totality of circumstances -- most importantly, whether the driver is observably impaired -- and accordingly punishes motorists who drive while impaired from having recently used illicit drugs.

#### Per Se DUID Laws

*Per se* laws prohibit drivers from operating a motor vehicle if they have greater than a set level of a drug or drug metabolite present in their system. Most Americans are already familiar with the most common driving-related *per se* laws: those which classify drivers in violation of the law if their blood alcohol level is above .08%. Similar *per se* laws with strictly defined cut-off levels (a designated level of an active drug constituent or metabolite above which a sample is considered to be "positive" for a specific drug) are uncommon for DUID legislation.<sup>[2]</sup> This is because, according to the US Department of Transportation: "Forensic toxicologists generally have failed to agree on specific [*per*

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se levels] that could be designated as evidence of impairment. The lack of consensus about *per se* levels of drugs where impairment could be deemed makes it difficult to identify, prosecute or convict drugged drivers in most states."<sup>[3]</sup>

### "Zero Tolerance" *Per Se* Laws

Politicians and police have a simple, if unscientific, response to researchers' failure to define *per se* standards for illicit substances: enact so-called "zero tolerance" *per se* laws. In their strictest form, these laws forbid drivers from operating a motor vehicle if they have any detectable level of an illicit drug or drug metabolite present in their bodily fluids.

This approach is not based on science but on convenience. In essence, "zero tolerance" *per se* laws impose a new, driving-related offense that is, in the words of one of its chief proponents, "divorced from impairment." Under this standard, any driver who tests positive for any trace amount of an illicit drug or drug metabolite (byproducts, though not necessarily psychoactive ones, produced following drug metabolization), is guilty *per se* of the crime of "drugged driving," even if the defendant was sober. In the case of marijuana, these laws are particularly troublesome. THC, marijuana's main psychoactive constituent, may be present in the blood of heavy cannabis users for several hours or even days after past use,<sup>[4-5]</sup> long after any performance impairing effects of the drug have subsided.<sup>[6]</sup> Marijuana's primary inert metabolite THC-COOH is detectable in urine for weeks or sometimes even months after past use.<sup>[7]</sup> As a result, under the strict implementation of "zero tolerance" *per se* DUI drug laws, a person who consumes a joint on Monday could conceivably be arrested the following Friday and charged with "drugged driving," even though he or she is no longer impaired or intoxicated.

To date, 15 states have enacted "zero tolerance" *per se* DUI drug laws: Arizona (state-authorized medical cannabis patients are excluded under the statute), Delaware, Georgia, Idaho, Illinois, Indiana, Iowa, Michigan, Minnesota (cannabis is excluded under the statute), North Carolina (cannabis is excluded under the statute), Rhode Island (state-authorized medical cannabis patients are excluded under the statute), South Dakota, Utah, Virginia (cannabis is excluded under the statute), and Wisconsin. Of these, Arizona, Delaware, Georgia, Idaho, Illinois, Indiana, Iowa, South Dakota, and Utah legally sanction drivers from operating a motor vehicle with any detectable level of a controlled substance or its metabolites in one's bodily fluids. Three additional states -- Nevada, Ohio, and Pennsylvania -- have enacted *per se* DUI drug laws prohibiting motorists from operating a vehicle if they have detectable levels of illicit drugs or drug metabolites over the state's mandated threshold. Complete details regarding these and other state DUI drug laws is available from NORML.

### Federal Proposals

In recent years, politicians and bureaucrats at the federal level have campaigned for states to enact zero tolerance DUI drug legislation. Bills mandating states to impose such limits have been

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unsuccessfully introduced in various Congressional sessions. One such proposal sought to withhold highway funding from any state legislature that refused to enact mandatory minimum penalties for anyone convicted of driving under the influence of illegal drugs, while others have sought to mandate states to enact criminal statutes sanctioning any driver who operates a motor vehicle "while any detectable amount of a controlled substance is present in the person's body, as measured in the person's blood, urine, saliva, or other bodily substance."

Most recently, the 2011 edition of the White House Federal Drug Strategy praises the statewide imposition of zero tolerance laws in those states that have enacted them and calls for the expansion of such laws elsewhere. The report states: "Fifteen states have passed laws clarifying that the presence of any illegal drug in a driver's body is *per se* evidence of impaired driving. ONDCP will work to expand the use of this standard to other states and explore other ways to increase the enforcement of existing DUID laws."<sup>[8]</sup>

### Blood or Urine? Fluid Matters

The language of "zero tolerance" *per se* laws is critical. Most state zero tolerance DUID laws contain some variation of the following language:

It is unlawful for any person to drive or be in actual physical control of any vehicle while there is any detectable amount of a controlled substance or its metabolite present in the person's body, as measured in the person's blood, urine, saliva, or other bodily fluid.

The distinction between "parent drugs" and "drug metabolites" is a critical one. The term "parent drug" refers to the identifiable psychoactive compound or compounds present in a controlled substance (i.e., for cannabis-based drugs, marijuana and hashish, the parent drug is delta-9-tetrahydrocannabinol aka THC). By contrast, the term "drug metabolite" refers to those byproducts produced in the body after a substance is metabolized. Though the presence of metabolites in blood or urine generally is indicative that a certain substance was previously consumed, not all metabolites are psychoactive (i.e., Marijuana's THC-COOH metabolite, which is readily detectable in urine, is not psychoactive, but 11-hydroxy-THC is.), nor does their detection reliably establish that the parent drug is still present in the body. (With cannabis, THC-COOH is typically not even present in urine until well after the drug has been consumed.) Consequently, the US Department of Justice affirms that a positive drug test result for the presence of a drug metabolite "does not indicate ... recency, frequency, or amount of use; or impairment."<sup>[9]</sup> A US Department of Transportation report further states that while a positive test for drug metabolites is "solid proof of drug use within the last few days, it cannot be used by itself to prove behavioral impairment during a focal event."<sup>[10]</sup>

Understanding the various methods of drug detection is also critical. As stated above, most zero tolerance DUID legislation allows for law enforcement to mandate a suspect to have his or her

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"bodily fluids" screened for the presence of drugs or drug metabolites. The "bodily fluids" in question are: blood, saliva, and urine.

### Urine

Urinalysis remains the most popular means of drug detection available in the United States, particularly in workplace drug testing programs. Courts generally regard urine specimen collection, when compared to blood sampling, as a relatively non-invasive practice, and there are national standards for urine testing in place as well as national certification programs for laboratories performing forensic urine drug testing. However, standard urinalysis tests for marijuana, in their current form, are not suitable for detecting drug impairment or recent drug use because the procedure only detects the presence of inactive drug metabolites, not the parent drug THC. Presently, no dose-concentration relationship exists correlating drug metabolite levels to drug impairment,<sup>[11]</sup> and the presence of a drug metabolite, even when confirmed, "does not indicate ... recency, frequency, or amount of use; or impairment."<sup>[12]</sup> Nevertheless, because urinalysis is regarded as relative non-invasive and offers testers a multi-day window for the detection of drug metabolites, and because rapid response point-of-collection-testing (POCT) immunoassay devices are available on the commercial market, "a number of states with *per se* 'zero tolerance' laws are currently using urine tests to enforce their laws under which the prosecutor must only show that the driver of the car had prohibited metabolites in his/her system."<sup>[13]</sup>

### Blood

Because blood collection is generally viewed by the courts as invasive and requires the use of medically trained personnel, its use in DUI cases is often seen as impractical. However, many European DUI laws rely on blood specimen collection. This is because, unlike urinalysis, both drug metabolites *and* parent drugs are readily detectable in the blood. In general, peak THC serum levels typically exceed 100 ng/ml minutes after drug ingestion and then fall rapidly.

To date, scientists have not reached a consensus regarding the establishment of specific plasma concentrations for illicit substances that could be designated as evidence of driver impairment. Establishing such thresholds for cannabis is especially problematic. This is primarily because peak THC blood levels following inhalation do not consistently correspond with levels of peak impairment.<sup>[14]</sup> (In fact, subjects who inhale THC typically ascertain their THC blood levels within minutes, well before the onset of the drug's peak impairing effects.) As a result, it is virtually impossible to make inferences regarding a subject's impairment based upon the presence of THC alone.<sup>[15-16]</sup> (For further information, please see the NORML report, 'Cannabis and Driving: A Scientific and Rational Review')

### Saliva/Oral Fluid

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Saliva testing typically detects for the presence of parent drugs. However, cannabinoids are difficult to detect in oral fluids, as only a minute amount of the drug is excreted into the saliva. As a result, most current saliva testing technology appears to only detect the presence of cannabis for a period of approximately one to two hours following drug ingestion.<sup>[17]</sup>

Because saliva testing is generally seen as non-invasive, and rapid response point-of-collection devices exist, it is viewed by some law enforcement organizations, in particular the European Police Traffic Network TISPOL,<sup>[18]</sup> as ideal for use by police on the side of the road. Yet, recent studies have shown considerable variation in results among test subjects. An ongoing pilot program in Victoria, Australia, utilizing road side oral screening technology has also yielded several false positives when used under roadside conditions.<sup>[19]</sup> Most recently, an international assessment of roadside saliva collection devices by the US Department of Transportation and other agencies determined, "[N]o device was considered to be reliable enough in order to be recommended for roadside screening of drivers."<sup>[20]</sup>

### How Dangerous is "Drugged Driving" Anyway?

To date, "[The] role of [illicit] drugs as a causal factor in traffic crashes involving drug-positive drivers is still not well understood."<sup>[21]</sup> While some studies have indicated that illicit drug use is associated with an increased risk of accident, a relationship has not yet been well established regarding the use of psychoactive substances and crash severity.<sup>[22]</sup> Some reviews of traffic fatality data indicate that, in general, drivers with the presence of illicit drugs in their system possess an enhanced fatality risk compared to sober drivers. However, this risk is far lower than the fatality risk associated with drivers who operate a vehicle with the presence of alcohol in their system above or near the legal limit for intoxication.<sup>[23]</sup> According to one review of the literature: "The risk of all drug-positive drivers compared to drug-free drivers is similar to drivers with a blood alcohol concentration of 0.05%. The risk is also similar to drivers above age 60 compared to younger drivers [around age 35]."<sup>[24]</sup>

For a comprehensive evaluation of cannabis intoxication and its impact on psychomotor performance, please see the NORML report, 'Cannabis and Driving: A Scientific and Rational Review'.

### Who's Behind the "Zero Tolerance" Campaign?

The push for the implementation of "zero tolerance" *per se* DUI legislation began over a decade ago. In large part, this push was primarily driven by a small cabal of prohibitionists, police, drug testing proponents. Most prominent among them were Michael Walsh and Robert Dupont.

Michael Walsh is executive director of the Walsh Group,<sup>[25]</sup> a federally funded organization that develops drug testing technology and lobbies for rigid workplace drug testing programs. Walsh is

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the former Director of the Division of Applied Research at the US National Institute on Drug Abuse (NIDA), and formerly served as the Associate Director to the Drug Czar.

Michael Walsh has been the impetus and the point man behind the US push toward state "zero tolerance" DUID legislation for some time. In November 2002, the Walsh Group partnered with the ONDCP to lobby state legislatures to replace their effect-based DUID laws with "zero tolerance" *per se* legislation. Then, at a joint ONDCP/NIDA conference held in February of 2004, Walsh pronounced, "There is clearly a need for national leadership at the federal level to develop model statutes and to strongly encourage the states to modify their laws."

Two weeks later, legislators in Congress began debating legislation to mandate states do just that. Though the Congressional measure failed, annual reports released by the White House Office of National Drug Control Policy since that time affirm that the passage of such legislation remains a primary policy goal. Today, the Walsh Group remains the primary lobby and educational organization on DUID-related information, working in concert with the Drug Czar's office to promote "zero tolerance" DUID legislation.

The second leading proponent of the enactment of "zero tolerance" DUID legislation is former 1970s Drug Czar Robert DuPont -- another ex-NIDA director who now helms the workplace drug testing consultation firm Bensinger, Dupont & Associates.<sup>[26]</sup> Over the past two decades, Dupont has been a key player in the development and enactment of workplace drug testing guidelines, including the federal regulations that govern the testing of federally licensed drivers.<sup>[27]</sup> Dupont is now lobbying to expand these federal guidelines to apply to all motorists. He also favors the establishment of random, roadside drug testing checkpoints.<sup>[28]</sup> "We must move away from the concept of you can't drive impaired by drugs to you can't drive on drugs at all," he says, noting that drivers who test positive for drug metabolites but are otherwise unimpaired should be stripped of their license and then be monitored through regularly scheduled drug tests, including hair testing, for a period of two to five years. "Most people don't need [drug] treatment, they need a reason not to use drugs," and the enforcement of "zero tolerance" DUID legislation gives them that incentive, he believes.<sup>[29]</sup>

### How to Combat "Zero Tolerance" DUID Legislation

From a legislative standpoint, it is vital that opponents of "zero tolerance" *per se* legislation express to politicians the fact that they strongly support the goal of keeping impaired drivers off the road -- regardless of whether the driver is impaired from alcohol or other drugs. In practice, however, "zero tolerance" DUID laws do little to meet this goal. Rather, they attempt to misuse the traffic safety laws in order to identify and prosecute certain illicit drug consumers *per se* by inappropriately defining sober drivers who present no traffic safety risk as legally impaired. Moreover, they eliminate any incentive for cannabis users to curb their use prior to driving, as the law fails to

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differentiate between an offender who may have consumed marijuana within the past hour versus one who may have consumed marijuana several days earlier.

By comparing "zero tolerance" DUID laws to existing state laws prohibiting drunk driving, the intellectual dishonesty of these laws becomes even more apparent.

Do drunk driving laws punish drivers for simply consuming alcohol? No. They sanction drivers who are impaired by alcohol to the point that they are no longer safe to operate a motor vehicle. Why not apply this same standard to DUID legislation (as so-called 'effect-based' standards wisely do)? Do drunk driving laws target drivers for having previously consumed alcohol some days or weeks earlier? Of course not. They sanction drivers for present intoxication, and only if that intoxication is presently affecting their driving performance. Again, why not apply this same common-sense standard to DUID legislation? Do drunk driving laws set their *per se* levels at zero? No, they employ scientifically sound cutoff levels that can be correlated to impairment of performance. Once again, why not apply this same standard to DUID laws?

Fortunately, in recent years more lawmakers have begun to call such laws into question, rejecting *per se* and "zero tolerant" *per se* proposals for cannabis and other substances in several states, including California, Colorado, Montana, and Nebraska.

### Defeating "Zero Tolerance"

Below are some suggestions for challenging *per se* and "zero tolerant" *per se* legislation for cannabis and other substances.

1. Epidemiological data is lacking on the number of people who drive under the influence of controlled substances, as is any objective evidence that "zero tolerance" DUID laws have a deterrent effect on drivers or have led to a reduction in the number of motorists driving under the influence of drugs. According the Department of Transportation, "The role of drugs as a causal factor in traffic crashes involving drug-positive drivers is still not understood."<sup>[30]</sup> Further, "Zero-concentration limit[s] have done nothing to reduce DUID or deter the typical offender because recidivism is high in this population of individuals. ... Indeed, many traffic delinquents ... are criminal elements in society with previous convictions for drunk and/or drugged driving as well as other offenses. The spectrum of drugs identified in blood samples from DUID suspects has not changed much since the zero-limit law was introduced."<sup>[31]</sup>
2. There exists no scientific consensus on appropriate cutoff levels for detecting the presence of drugs and/or drug metabolites in bodily fluids other than urine (and in this case, the standardized cutoffs are not linked to impairment). In particular, oral fluid assays for most drugs of abuse are still in developmental stages. As a result, "There are no nationally



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established standard methods for oral fluid drug testing, nor are there any certification programs currently available" to validate the accuracy of the test result.<sup>[32]</sup>

3. Most importantly, there exists no scientific standards correlating drug concentration to impairment of performance. There exists no known dose concentration relationship correlating drug metabolite levels in the urine or blood to impairment, nor does there exist a consensus regarding at what concentration levels the detection of a parent drug in the blood or saliva is associated with driver impairment. (For further information on this particular topic, please see the NORML report, 'Cannabis and Driving: A Scientific and Rational Review'.)
4. Many DUID laws fail to properly define who can be tested and under what circumstances. Drug testing, particularly blood testing, is an invasive practice that should not be performed unless a police officer or Drug Recognition Expert has first established that a driver is impaired by a substance other than alcohol, and has been placed under arrest.
5. All positive test results must be confirmed at an accredited lab for accuracy. However, most state laws fail to appropriate funding for confirmation testing, or allow for the establishment of accredited labs to perform this testing. Non-accredited labs may use cutoff standards that vary from the national guidelines, thus bringing the accuracy of their test results into question.
6. Finally, if the presence of illicit drugs or drug metabolites were detected through the use of a rapid point-of-collection-testing (POCT) immunoassay devices (This would only apply to urine and oral collection devices.), then confirmation testing by a blood test in a toxicology lab is required, as is independent verification of the initial result. (Studies have found that police officers are more likely than trained lab technicians to make "human errors" using POCT devices and interpreting the results.) Lastly, most POCT technology is not FDA approved, and thus, appears open to legal challenges.

### Footnotes

[1] *USA Today*. "Growing danger: Drugged driving." October 21, 2004; *Las Vegas Review-Journal*. "Congress must address issue of drugged driving." March 21, 2004; *New York Times*. "Many, undetected, use drugs and then drive." November 14, 2002.

[2] To date, only Pennsylvania, Nevada, Ohio and Virginia have enacted per se standards for DUID offenses. Complete details of these and other state DUI laws is available from NORML here: [http://norml.org/index.cfm?Group\\_ID=6669](http://norml.org/index.cfm?Group_ID=6669).

[3] US Department of Transportation, National Highway Traffic Safety Administration. *State of Knowledge of Drug-Impaired Driving: FINAL REPORT*. September 2003.

[4] Toennes et al., 2008. Comparison of cannabinoid pharmacokinetic properties in occasional and heavy users smoking a marijuana or placebo joint. *Journal of Analytical Toxicology* 32: 470-477. "Heavy users might exhibit measurable cannabinoid concentrations in blood, even if the last cannabis use was more than 24 hours ago. This is due to redistribution from deep compartments and to the prolonged elimination of THC."

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- [5] Karschner et al., 2009. Do Delta-9-tetrahydrocannabinol concentrations indicate recent use in chronic cannabis users? *Addiction* 104: 2041-2048. "Substantial whole blood THC concentrations persist multiple days after drug discontinuation in heavy chronic cannabis users."
- [6] Ronen et al., 2007. Effects of THC on driving performance, physiological state and subjective feelings relative to alcohol. *Accident, Analysis and Prevention* 40: 926-934. "No THC effects were observed after 24 h on any of the measures."
- [7] Musshoff and Madea. 2006. Review of biological matrices (urine, blood, and hair) as indicators of recent or ongoing cannabis use. *Therapeutic Drug Monitor* 28: 155-163.
- [8] <http://www.whitehousedrugpolicy.gov/strategy/actionitems.html#15a>
- [9] US Department of Justice, Bureau of Justice Statistics. *Drugs, Crime, and the Justice System* (NCJ-133652). December 1992.
- [10] US Department of Transportation, National Highway Traffic Safety Administration. *State of Knowledge of Drug-Impaired Driving: FINAL REPORT*.
- [11] Yale Caplan. "Technology for Testing Drugs of Abuse in DUID." In: *Developing Global Strategies for Identifying, Prosecuting, and Treating Drug-Impaired Drivers: Symposium Report*. June 2004.
- [12] US Department of Justice, Bureau of Justice Statistics. *Drugs, Crime, and the Justice System*. op. cit.
- [13] Department of Transportation, National Highway Traffic Safety Administration. *State of Knowledge of Drug-Impaired Driving: FINAL REPORT*. op. cit.
- [14] Ramaekers et al. Dose related risk of motor vehicle crashes after cannabis use: an update. In: *Drugs, Driving, and Traffic Safety* (eds. Vester et al.,) World Health Organization, 2009. "Individual drivers can vary widely in their sensitivity for THC induced impairment as evinced by the weak correlations between THC in serum and magnitude of performance impairment."
- [15] US Department of Transportation, National Highway Traffic Safety Administration. *Marijuana and Actual Driving Performance: Final Report*. op. cit. "One of the program's objectives was to determine whether it is possible to predict driving impairment by plasma concentrations of THC and/or its metabolite, THC-COOH, in single samples. The answer is very clear: it is not. Plasma of drivers showing substantial impairment in these studies contained both high and low THC concentrations; and drivers with high plasma concentrations showed substantial, but also no impairment, and even some improvement."
- [16] Elliot et al. Marijuana DUI Workgroup: Recommendation to the Drug Policy Task Force and Colorado Commission on Criminal and Juvenile Justice. 2011. "Whereas BAC (Blood Alcohol Content) can be accurately measured and correlated with behavioral impairment, this may not be the case with cannabis ... Alcohol is water soluble; cannabis is stored in the fat and is metabolized differently, making a direct correlation with behavior difficult to measure."
- [17] Spiehler et al. *Analysis of Drugs in Saliva*. In Goldberger et al: *On-Site Drug Testing*. Humana Press Inc. 2001.
- [18] TISPOL Press Release: *Participation in Operational Testing of Drug Detection Devices by Manufacturers of Fluid Screening Devices*.
- [19] Herald Sun. *Roadside drug tests in turmoil*. December 22, 2004.
- [20] See: <http://www.rosita.org/>, Executive Summary.

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[21] US Department of Transportation, National Highway Traffic Safety Administration. *State of Knowledge of Drugged Driving: FINAL REPORT*. op. cit.

[22] Smink et al. 2005. Drug use and the severity of traffic accident. *Accident, Analysis and Prevention* 37: 427-433.

[23] Franjo Grotenhermen. *Drugs and Driving: Review for the National Treatment Agency, UK*. Nova-Institut (Germany). November 2007.

[24] Ibid.

[25] <http://www.bensingerdupont.com/>

[26] These guidelines subject licensed commercial drivers to submit to random urinalysis for the purpose of screening for illicit drug metabolites. These regulations also establish *per se* guidelines for drug metabolites, although these cutoff levels are admittedly not correlated to impairment.

[27] Robert Dupont. "Drugs and driving." Letter to the editor: *USA Today*. October 28, 2004.

[28] Robert Dupont. "Conviction is an Opportunity for Intervention." In: *Developing Global Strategies for Identifying, Prosecuting, and Treating Drug-Impaired Drivers: Symposium Report*. June 2004.

[29] Ibid.

[30] US Department of Transportation, National Highway Traffic Safety Administration. *State of Knowledge of Drug-Impaired Driving: FINAL REPORT*. op. cit.

[31] Jones. 2005. Driving Under the Influence of Drugs in Sweden with Zero Concentration Limits in Blood for Controlled Substances. *Traffic, Injury and Prevention* 6: 317-322.

[32] US Department of Transportation, National Highway Traffic Safety Administration. *State of Knowledge of Drug-Impaired Driving: FINAL REPORT*. op. cit.