



# Research In Progress

## Expert Panel for Developing Protocols for Impairment for DUI

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Driving under the influence of alcohol is a major public health problem. Prior studies have tended to emphasize the impact of alcohol-related impairment, since it is still the most frequently recognized contributor to impaired driving. Research has shown that alcohol impairment measured in terms of blood alcohol concentration levels (BAC), elevates crash risk. Moreover, strong methodological and legal standards exist to measure and prosecute driving-related impairment in terms of BAC. Though important, less is known about the specific concentration levels necessary for drugs to impair an individual's ability to drive.

There is still no consensus regarding the relationship between concentrations of drugs in bodily fluids (e.g., usually blood, urine, or saliva) and driving impairment for both illicit and licit drugs. Moreover the ethanol model of driving impairment fails to adequately account for the tremendous variability in terms of drug levels found in blood, urine, or saliva. Our knowledge of potential impairment and crash risk is further complicated by variation in the actual dose, the pattern or frequency of use, and the way the drug is ingested, metabolized, and excreted. These and other issues are barriers to the effective measurement and detection of drugs in drivers who may be impaired.

To address some of these issues, NHTSA convened a multidisciplinary Expert panel, in November 2008 and March 2009, to ascertain whether it is possible to develop a protocol to establish whether a particular drug (illicit or licit—prescription or over-the-counter) can impair driving, and if so, how such a protocol could be established.

The panel agreed that developing a definitive list of impairing substances was not possible because of varying effects from dose, tolerance, drug combinations, and latency between dosing and driving, and metabolic differences. However it was agreed that better information regarding the likely effects of a drug on driving, and the risk of crash involvement could be assessed through a variety of approaches, including pharmacological, epidemiological, and behavioral review and assessment. They have met again to discuss further the issues associated with developing a protocol, and to get additional feedback from Federal partners with research, policy, and regulatory interests in drugs. A strategy paper consolidating all of the information related to the meeting and articulating how a protocol could be developed will be put into a final report for this project.

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