Explore the Predictive Validity of DEC Program Tests

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Drug Recognition Experts (DREs) utilize a variety of readily observable signs and symptoms that are accepted in the medical community as reliable indicators of drug influence. The Drug Evaluation and Classification (DEC) program trains officers to determine whether a suspect is under the influence of alcohol and/or drugs, using an evaluation method (called a Drug Influence Evaluation (DIE)) that combines basic knowledge about drug pharmacodynamics with the administration of psychomotor tests to determine the category of drugs. During an evaluation, the DRE captures about 60 different elements, in numerical, pictorial and narrative form. Based on the information gathered, the DRE determines whether the subject is under the influence of drugs, the category of drugs, and requests a biological specimen for confirmation. A DRE evaluation can take a considerable amount of time; the toxicology results may take weeks or months.

It is unclear whether it is necessary for DREs to collect all of the information that the evaluation currently demands, or whether a core set of the measures are more directly relevant. Therefore, NHTSA is conducting a study to collect and code all the information found on a large sample of DRE cases, which resulted from traffic stops, to determine which combination(s) of elements provide the most efficient and effective means to predict the toxicology-confirmed results of the evaluation.

The objectives of this study are to:
a) gather a sample of DRE evaluation cases confirmed by blood samples;
b) code the information found on the data sheets and create a database of measures from the sample; and
c) analyze the data to determine connections between the measures and drug class confirmed by blood samples and determine which combination of factors offers the best predictive validity in the most efficient and effective manner.

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