

MINUTES

KANSAS DUI COMMISSION

November 5-6, 2009
Room 143-N—Statehouse

Members Present

Senator Thomas C. (Tim) Owens, Chairperson
Representative Janice Pauls, Vice-chairperson
Senator David Haley
Representative Lance Kinzer
Greg Benefiel, Assistant District Attorney, Douglas County
Pete Bodyk, Kansas Department of Transportation
Major Mark Bruce, Kansas Highway Patrol
Honorable Judge Jennifer Jones
Wiley Kerr, Kansas Bureau of Investigation
Mary Ann Khoury, Victim advocate
Deb Stithem substituted for Don Jordan, Secretary, Kansas Department of SRS
Retired Police Chief Ed Klumpp
Sheriff Ken McGovern, Douglas County
Chris Mechler, Court Services Officer Specialist, OJA
Helen Pedigo, Executive Director, Kansas Sentencing Commission
Ted Smith substituted for Marcy Ralston, Kansas Department of Revenue
Honorable Peter V. Ruddick, 10th Judicial District
Dalyn Schmitt, Substance Abuse Professional
Les Sperling, President, KAAP
Jeremy Thomas, Parole Officer
Doug Wells, Attorney, Kansas Bar Association
Roger Werholtz, Secretary, Kansas Department of Corrections
Karen Wittman, Traffic Safety Resource Prosecutor, Attorney General's Office

Staff Present

Athena Andaya, Kansas Legislative Research Department
Jerry Donaldson, Kansas Legislative Research Department
Jason Thompson, Office of the Revisor of Statutes
Doug Taylor, Office of the Revisor of Statutes
Sean Ostrow, Office of the Revisor of Statutes
Karen Clowers, Committee Assistant

Others Attending

See attached list.

**Thursday, November 5
Morning Session**

The meeting was called to order by Chairperson Owens at 10:04 a.m.

The Commission reviewed the minutes of October 1 and 2, 2009. Corrections were made regarding attendance of members and spelling.

Ed Klumpp moved, Dalyn Schmitt seconded, to approve the minutes of October 1 and 2, 2009 as corrected. Motion carried.

Jeff Collier, State Coordinator, Kansas Drug and Classification/Standardize Field Sobriety Testing Program, Kansas Highway Patrol, addressed the Commission regarding Drug Recognition Experts (DREs) (Attachment 1). Mr. Collier provided an overview of the program in Kansas, indicating that officers are trained to detect DUIs caused by substances other than alcohol. This training is not part of basic police training. Evaluations are based on a standardized 12-step process, which was described in detail. DREs are recognized as technical experts and may testify as such in court.

Kevin Barone, Vanguard Offender Management, spoke on continuous alcohol monitoring devices (Attachment 2). Mr. Barone indicated there are no solid rules on house arrest across the State and there is much inconsistency between monitoring. He recommended the Commission set the criteria.

The Commission recessed for lunch.

Afternoon Session

The meeting reconvened at 12:50 p.m. The Commission heard reports of the subcommittees.

Law Enforcement/Record Keeping Subcommittee

Karen Wittman, Chairperson of the Subcommittee on Law Enforcement and Record Keeping, reviewed recommendations to date from that Subcommittee. The tentative recommendations are as follows:

Records

The Kansas Criminal Justice Information System (KCJIS) is the appropriate entity to collect and furnish data to agencies in need of information concerning DUI criminal history. This information would allow one inquiry that would check all records on an individual, such as: Department of Motor Vehicle (DMV) records, arrest history, and conviction data.

The Subcommittee envisioned an inquiry to KCJIS would produce a "certified" record of information held by the State of Kansas concerning an individual identified. A report could be

generated that would provide an "evidentiary" report which would be offered in court as the "official record." This might require a legislative change in KSA 60-465 (Authentication of Copies of Records).

Finally, the Subcommittee would like a "subscription and notify" program to be created to generate information to alert prosecutors, court officials, and probation officers of any activity of an individual pertaining to any current law enforcement contact on a daily basis.

Administrative Driver's License Hearings (DL Hearings)

The Subcommittee tentatively decided to recommend that administrative DL hearings should remain with the Kansas Department of Motor Vehicles. A fee, similar to a docket fee, should be assessed for a request for hearing. The fee assessed would be different depending on whether a "face to face" hearing or a "phone" hearing is requested.

The Subcommittee would like to establish a protocol for the hearing and require hearing officers to receive special training. Finally, there might need to be a statutory change to identify specifically the scope of the hearing.

Ignition Interlock

The Subcommittee would like to require ignition interlock devices to use photo technology to insure the person producing the sample is the person required to produce the sample.

Additionally, the Subcommittee would like to have a report generated of the persons required by the Division of Motor Vehicles (DMV) to have interlock in their vehicle and compare that to the reports generated and submitted to DMV from interlock providers. A notification to those individuals required to have interlock that do not have the device that further sanctions may be imposed. That would require some type of sanction for those individuals not having interlock in their vehicle when required. The possible sanctions included impoundment of vehicle or extension of requirement of interlock, or both. The Subcommittee would like a graduated sanction for those individuals who have had a prior violation for failure to have an ignition interlock device in their vehicle.

The Commission as a whole discussed these recommendations but did not decide upon a final recommendation for the interim report.

Criminal Justice Subcommittee

Representative Janice Pauls reviewed the recommendations of the Criminal Justice Subcommittee because the Chairperson of the Subcommittee, Roger Werholtz, was unable to attend the portion of the Subcommittee meeting when recommendations were voted on by the Subcommittee. Subcommittee recommendations included:

- The current penalty for a first conviction of DUI is adequate;
- The current penalty for a second conviction of DUI is adequate with the note that the five days in jail should be a firm five days in jail, rather than 48 hours in jail with the option of serving remainder of the mandatory minimum sentence on work release or house arrest, as authorized by the current statute;

- The penalty for a third conviction of DUI should be a misdemeanor, rather than a felony, as it is in current law, and it should be solely under the jurisdiction of the district court. The Subcommittee recommends the mandatory minimum sentence be ten days in jail with no house arrest or work release, 90 days person alcohol monitoring by technological means, parole of up to 18 months through community corrections, and treatment as ordered by the court based on a standardized substance abuse evaluation;
- The penalty for a fourth conviction of DUI should be a felony with a sentence of prison and treatment;
- Instead of an Alcohol and Drug Safety Action Programs (ADSAP) evaluation, do a full-blown clinical evaluation and follow the recommendations of the assessment;
- Criminalize refusal to take a breath alcohol test (but the Subcommittee reserves the option to make additional clarifications of this position); and
- Delay for an additional year the effective date of the provision in 2009 HB 2096 which would amend the law regarding penalties for third convictions of DUI to make the penalty the same as a fourth or subsequent conviction of DUI under current law. The penalty for a fourth and subsequent conviction of DUI would be a new penalty. The provisions of this section would be in effect on July 1, 2010.

The Commission as a whole discussed the recommendations. Based on Commission discussions, further discussions will include several items, including: criminalization of breath test refusals; expungement or decay of records, or both; standards for counting prior convictions; DUI courts; and determination of where the fourth DUI will be on the sentencing grid, and penalties.

Substance Abuse Evaluation and Treatment Subcommittee

Les Sperling, Chairperson of the Substance Abuse Evaluation and Treatment Subcommittee, reviewed the recommendations of the Subcommittee. He stated the effective evaluation, education, and treatment of substance use plays a vital role in the continuum of interventions targeted to reduce the incidence of DUI in the State of Kansas. The following recommendations are respectfully submitted in an effort to enhance the quality and scope of treatment services in Kansas and to reduce the impact that DUI has on the citizens of the State of Kansas.

Require All Alcohol and Drug Safety Action Programs to Be Licensed by Social and Rehabilitation Services-Addiction and Prevention Services

The Kansas Department of Social and Rehabilitation Services (SRS) currently has licensing standards for Alcohol and Drug Safety Action Programs (ADSAP) that include standards for both evaluation and Alcohol and Drug Information School curriculum. However, under current legislation, ADSAP providers are not required to obtain this important license and are not subject to annual licensing visits that ensure compliance with the minimum standards of competency, as defined in the state standards. This has resulted in a disparity of the quality and consistency of ADSAP evaluations across the State of Kansas.

Licensed ADSAP Providers Comprise the ADSAP Network
Available to All Judicial Districts and Municipal Courts

Each judicial district currently selects ADSAP providers. While judicial districts strive to select providers in a manner consistent with current statutes, testimony provided to the Kansas Substance Abuse Policy Board and Kansas DUI Commission reveals that selection criteria currently utilized are not consistent. Municipal courts also may select ADSAP providers. While most municipal courts utilize the provider list generated by their district court, they are not required to do so and there are instances where district and municipal court provider lists differ. This can be confusing to all stakeholders and in some cases, limit access to services. If ADSAP providers were licensed by SRS, SRS could provide all stakeholders with a complete listing of eligible providers.

It is anticipated that the number of providers available to complete ADSAP work will increase if licensing is required.

Require All DUI Substance Use Evaluations Be Completed
in a Standardized Electronic Format

Testimony submitted to the Kansas Substance Abuse Policy Board indicates that DUI substance use evaluations prepared for the court for pre-sentencing purposes vary widely in quality and scope. It is recommended that the American Society of Addiction Medicine Patient Placement Criteria 2 (ASAMPPC2) be utilized as the foundation of the standardized evaluation. The ASAMPPC2 has been widely accepted as the most comprehensive information and decision-making tool used to assess the severity of alcohol/drug problems and recommend the appropriate intensity and level of treatment intervention. Collecting this information in an electronic format is crucial because it will provide an efficient method for treatment histories and outcome measures, to be included in the larger DUI data system. Adequate resources for the implementation of the standardized evaluation should be made available to SRS.

The Commission as a whole discussed the recommendations. The Subcommittee will continue to work on a standardized ADSAP evaluation.

Dalyn Schmitt stated that diagnosis of substance abuse and dependency is a recognized chronic illness. She stressed the importance of a correct diagnosis on the first offense.

The Commission broke into subcommittees for further discussion on their assigned topics.

The Commission reconvened at 3:40 p.m.

Chairman Owens indicated the Commission will continue with subcommittee meetings in the morning and then work from noon until approximately 2:00 p.m. on the interim report to the Legislature.

The meeting adjourned at 4:00 p.m.

Friday, November 6
Morning Session

The meeting was called to order by Chairperson Owens at 9:10 a.m.

The Commission broke into Subcommittees for discussion on their assigned topics.

Afternoon Session

The Commission reconvened at 12:40 p.m.

Law Enforcement/Record Keeping Subcommittee

Karen Wittman reported the Law Enforcement Subcommittee met jointly with the Criminal Justice Subcommittee to discuss the "look back" issue regarding previous convictions. Following a lengthy discussion, the Subcommittees recommend using the specific date of July 1, 1996 for charging offenses. This is due to the lack of complete driving records available before that date. This does not preclude the use of older records for judges to use in sentencing. The subcommittees then broke into their individual groups.

The Law Enforcement Subcommittee then discussed the issue of criminalizing test refusals, the purpose being to stop individuals from avoiding charges of a DUI. Three options were discussed:

- Whether to make it a second criminal offense;
- Make it a per se violation; or
- Make it a rebuttal presumption.

The pros and cons of each were covered and the Subcommittee will continue to work on this issue.

Substance Abuse Evaluation and Treatment Subcommittee

Les Sperling reported the Substance Abuse Subcommittee has not reached any specific recommendations but continues to discuss the issues presented yesterday. These include:

- Standardized electronic assessment;
- Direct payment of fees to treatment providers; and
- A system to provide oversight of the program providing assessment of supervision and monitoring.

Criminal Justice Subcommittee

Roger Werholtz indicated the Criminal Justice Subcommittee has nine issues to address and recommendations are based on the basic principles of:

- Supervision should be based on risk;
- Treatment should be based on meaningful evaluations; and
- The number of courts hearing DUI cases should be reduced.

The Subcommittee has made some previous recommendations, one of which is that third DUI convictions are treated as a misdemeanor but that those cases are heard in a district court. The Subcommittee further recommends the third DUI be sent to community corrections for evaluation and assessment and then assigned based on the results of that assessment, being either continued supervision under community corrections or supervision under court services.

The second recommendation is any municipal court wanting jurisdiction over DUI cases must be approved by the Supreme Court. Rules should include standardized risk assessments, standardized substance abuse evaluations, and the capacity to supervise according to that assessment and evaluation.

The third recommendation is in regard to second DUI offenses. In court hearings following a second DUI conviction, the court would be required to order a standardized evaluation and a standardized assessment.

Ed Klumpp recommended adding to the recommendation regarding approval of municipal courts. His suggestion was to add to list of criteria the ability to comply with electronic recording of the arrest and disposition.

The Chairman reviewed Subcommittee report parameters for the interim report to be reviewed in December meeting.

The meeting adjourned at 1:40 p.m.

The next scheduled meeting is December 7, 2009.

Submitted by Karen Clowers
Edited by Athena Andaya

Approved by Committee on:

December 7, 2009

(Date)

PLEASE CONTINUE TO ROUTE TO NEXT GUEST

DUI COMMISSION COMMITTEE GUEST LIST

DATE: Nov 5, 2009

NAME	REPRESENTING
Rob Mealy	KENNEDY & Assoc.
Bob Keller	Jo Co Sheriff
Michelle Butler	Cap. Strategics
Jeff Collier	KHP
Lynn Berone	Vanguard Offadr Mgmt
Spencer Duncan	Capitol Connection LLC
Tock Duncan	KWSWA
Greg Kenney	City of Lenexa
DARIN DERWALSH	KHP
Sty Westerlund	KNASWA

PLEASE CONTINUE TO ROUTE TO NEXT GUEST

DUI COMMISSION COMMITTEE GUEST LIST

DATE: Nov 6, 2009

NAME	REPRESENTING
Seymour	KNASCO
Jane Roe	Pastor
Corey Kenney	City of Lenexa
Shannon Bell	Little Government Relations
Michael Butler	Cap. Strategies
Kevin Brown	Vanguard Officer Mymh

DUI COMMISSION

*The Drug Evaluation and
Classification Program
2005 Training*

November 5, 2009

The Kansas DEC Program

Drug Recognition Experts



Jeff Collier, State
Coordinator



Kansas DRE's

Andover PD; Arkansas City PD; Augusta DPS;
Derby PD; Dodge City PD; Douglas County SO;
Ford County SO; Garden City PD; Harvey County
SO; Haysville PD; Johnson County SO; KHP;
Lansing PD; Leavenworth PD; Leavenworth
County SO; Leawood PD; Lenexa PD; Liberal PD;
Miami County SO; Newton PD; Olathe PD; Ottawa
PD; Overland Park PD; Prairie Village PD; Salina
PD; Sedgwick County SO; Topeka PD; Wichita
PD; Winfield PD

DEC PROGRAM

- Trains Law Enforcement to detect persons under the influence of drugs other than Alcohol
- Trained Officers are referred to as Drug Recognition Experts
- A standardized and systematic process to assess a persons
- Physical/Mental impairment
- Physical/Mental signs and symptoms of drug ingestion
- Physiological signs and symptoms of drug ingestion **

DEC PROGRAM

Kansas currently has a compliment Of 86 Drug Recognition Experts representing 29 Law Enforcement Agencies

Of the 86 DRE's 34 are currently serving the South Central area

31 Northeast
7 Southwest
5 Southeast
5 North Central

DEC PROGRAM



2008
466 Evaluations

1. CNS Depressants - 125
2. CNS Stimulants - 132
3. Hallucinogens - 8
4. Dissociative Anesthetics - 10
5. Narcotic Analgesic - 108
6. Inhalant - 5
7. Cannabis - 177

108 Determined Poly Drug Use
26 Determined no impairment
6 Medical Rule Out
6 Alcohol Rule Out
14 Tox found no Drugs

DEC PROGRAM

The DRE Training is **advanced** training in the detection of impaired drivers.

It is not part of the core basic training for Police Officers.

The core training does cover an "Introduction to Drugged Driving," a 4 hour course.

All Officers completing basic law enforcement training are capable of determining impairment through the SFST Training.

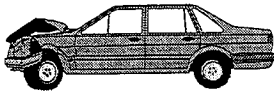
DEC PROGRAM

Applications require statement of support from Agency's Chief Law Enforcement Officer, Prosecuting Attorney, Presiding Judge.

The Training

- 2 Day Pre-School (16 hrs)
- 7 Day Main School (56 hrs)
- Certification Training - 12/3/75%
- Final Knowledge Test
- Instructor Interview
- State Coordinator Approval

THE DWI - DRUG PROBLEM



- Approximately 40% of all Fatal Crashes involve a Driver who is DWI
- About 27% of those Drivers are Impaired by a Drug other than Alcohol.

**DETECTION METHODS FOR
THE DRUG IMPAIRED
DRIVER**

**The Los Angeles Police Department
Pioneered the Drug Evaluation Process in
the Late 1970's by documenting observed
Signs and Symptoms of Suspected Drug
Impaired Drivers.**

**DETECTION METHODS FOR
THE DRUG IMPAIRED
DRIVER**

**In 1984, NHTSA and the National Institute
on Drug Abuse (NIDA) sponsored a
controlled laboratory evaluation of the
Drug Evaluation and Classification
process by Researchers at Johns Hopkins
University.**

**DETECTION METHODS FOR
THE DRUG IMPAIRED DRIVER
RESULTS OF THE JOHNS HOPKINS
STUDY**

- DRE's correctly identified 95% of the drug free subjects as unimpaired
- Identify 98.7% of the high dose subjects as impaired
- Identify the Category of drug for 91.7% of the high dose subjects. **

**DETECTION METHODS FOR
THE DRUG IMPAIRED
DRIVER**

1985 NHTSA Sponsored an additional Field
Validation Study

- ⊕ When a DRE claimed that a drug other than alcohol was present - he was correct 94% of the time
- ⊕ When a DRE identified at least one drug category, it was found 87% of the time
- ⊕ The DRE was correct 50% of the time in identifying all of the drugs in the persons system. **

**CATEGORIES OF DRUGS
WHICH CAUSE
IMPAIRMENT**

IN THE DRE EVALUATION PROCESS,
THERE ARE SEVEN BROAD
CATEGORIES OF DRUGS WHICH
THE DRUG RECOGNITION EXPERT
ATTEMPTS TO IDENTIFY FOR
PURUPOSES OF TOXICOLOGICAL
EXAMINATION.

CENTRAL NERVOUS SYSTEM DEPRESSANTS



- ALCOHOL
- VALIUM
- GHB
- ROHYPNOL
- XANEX
- SOMA
- BARBITURATES
- AMBIEN *

CENTRAL NERVOUS SYSTEM STIMULANTS

- ↳RITALIN
- ↳DEXADRINE
- ↳COCAINE
- ↳CRACK
- ↳CRANK
- ↳METHAMPHETAMINE
- ↳DESOXYN *



Halucinogens



- ↳LSD/MDA/STP
- ↳PEYOTE
- ↳ECSTASY-MDMA
- ↳PSILOCYBIN
- ↳JIMSON WEED
- ↳NUTMEG
- ↳MORNING GLORYS
- ↳SALVIA
- ↳BUFO TOAD *

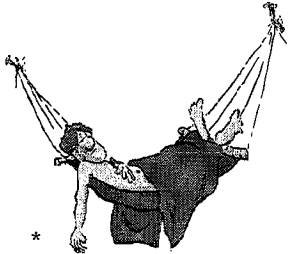
DISSOCIATIVE ANESTHETICS



- Ⓜ PCP
- Ⓜ KETAMINE
- Ⓜ KETAJECT
- Ⓜ KETALAR
- Ⓜ DEXTROMETHORPHAN
- Ⓜ SHERMS *

NARCOTIC ANALGESIC

- HEROIN
- MORPHINE
- OXICONTIN
- PERCODAN
- METHADONE
- DARVON
- CODEINE
- DEMEROL *



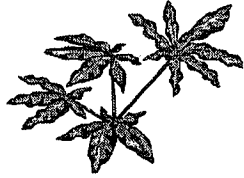
INHALANTS

- VOLATILE SOLVENTS
 - GASOLINE
 - PAINT THINNER
- AEROSOLS
 - PAINT
 - FRYING PAN LUBE
- ANESTHETIC GASES
 - ETHER
 - NITROUS OXIDE *



CANNABIS

- MARIJUANA
- HASHISH
- HASH OIL
- MARINOL *



THE TWELVE STEP PROCESS OF THE DRUG EVALUATION

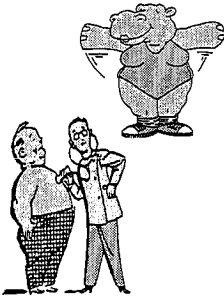


THE KANSAS DRE PROGRAM

The DEC Program is a Standardized, Systematic method of examining a person suspected of impaired driving to determine:

- Whether the suspect is impaired
- Whether the impairment is drug related or medical - and if drug related
- The broad category of drug(s) likely to have caused the impairment.

THE KANSAS DRE PROGRAM



The Evaluation consists of Psychophysical Tests and Physiological Measurements. This is known as the 12 Step Process

STEP 1

BREATH ALCOHOL TEST

To determine if the suspect is impaired by alcohol

DRE's will not do an evaluation if the BAC is .08 or higher.



STEP 2

INTERVIEW OF ARRESTING OFFICER

- DRUG PARAPHERNALIA
- OVERHEARD STREET SLANG FOR DRUG
- SIGNS OF IMPAIRMENT OBSERVED
- FIELD TESTING RESULTS
- ODORS
- ACTUAL DRUGS LOCATED *

STEP 3

PRELIMINARY EXAMINATION

FIRST ASSESSMENT OF MEDICAL CONDITION

- ILLNESS
- INJURY
- FIRST PULSE TAKEN

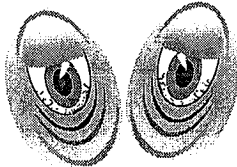
FIRST OPPORTUNITY TO ASSESS SUSPECTS:

- APPEARANCE
- BEHAVIOR
- SPEECH
- COORDINATION *

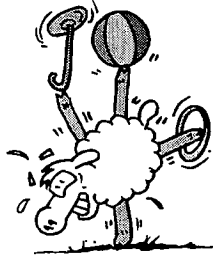
STEP 4

EXAMINATION OF THE EYES

- Horizontal Gaze Nystagmus
- Vertical Nystagmus
- Lack of Convergence.



STEP 5



DIVIDED ATTENTION PSYCHOPHYSICAL TESTS

- ⊙ Romberg Balance
- ⊙ Walk & Turn
- ⊙ One Leg Stand
- ⊙ Finger to Nose.

STEP 6

EXAMINATION OF VITAL SIGNS

- ☞ Blood Pressure
 - ☞ 120-140 mmHg
 - ☞ 70-90 mmHg
- ☞ Pulse
 - ☞ 60 - 90 bpm
- ☞ Temperature
 - ☞ 98.6 +/- 1 degree.

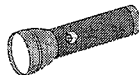


STEP 7

DARK ROOM EXAMINATION

Measurement of Pupil Size &
Normal Ranges

- ☞ Room Light
 - 2.5mm to 5.0 mm m=4.0mm
- ☞ Near Total Darkness
 - 5.0 mm to 8.5 m=6.5mm
- ☞ Direct Light
 - 2.0mm to 4.5mm m=3.0
- ☞ Reaction to Light
- ☞ Oral and Nasal Cavity Check



STEP 8



EXAMINATION OF MUSCLE TONE

- Muscle Rigidity
 - Tense
 - Hard
- Normal Muscle Tone
- Flaccidity of Muscles
 - Soft
 - Loose.

STEP 9

EXAMINATION FOR INJECTION SITES

- ❖ Fresh Puncture Wound
 - ❖ Redness and Oozing Fluid at Site
- ❖ Track Marks
 - ❖ Indicative of Prolonged Use
 - ❖ 50-100 Injections per inch of Tracks.



STEP 10

INTERVIEW AND SUSPECTS STATEMENTS AND OTHER OBSERVATIONS

- Interview in compliance with Miranda
- Confirm suspicion as to category of drug
- Past history of drug use.

STEP 11



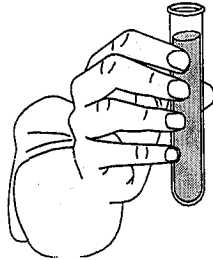
OPINION OF EVALUATOR

- Impaired
- Unable to operate a vehicle safely
- What category or categories of drugs is likely to cause the impairment.

STEP 12

TOXICOLOGICAL EXAMINATION

- [Collection of Urine for analysis
- [Collection of Blood for analysis.



TESTIMONY

**DRUG RECOGNITION
EXPERTS
TESTIFY AS
TECHNICAL EXPERTS**

SCIENTIFIC vs. TECHNICAL

QUESTION

HOW DO BUMBLE BEES FLY?



K.S.A 8-1001

IMPLIED CONSENT

(d) If there are reasonable grounds to believe that there is impairment by a drug which is not subject to detection by blood or breath test used, a urine test may be required.

K.S.A. 8-1005

WEIGHT OF EVIDENCE

(c) If there was present in the defendant's bodily substance any narcotic, hypnotic, somnifacient, stimulating or other drug which has the capacity to render the defendant incapable of safely driving a vehicle, that fact may be considered to determine if the defendant was under the influence of drugs, or both alcohol and drugs, to a degree that renders the defendant incapable of driving safely

The DRE Evaluation

What the 12 Step Process Reveals

1. That the Suspect is Impaired
2. That the Impairment is Drug Related
3. The Category or Categories of Drugs Likely to Produce the Documented Signs and Symptoms

DUI COMMISSION THE ROLE OF THE DRE

Prepared by Jeff Collier
Kansas DECP Coordinator

The crime of driving under the influence, whether by alcohol or drugs involves a simple premise: *That the driver of the vehicle is impaired to a degree that renders him/her incapable of safely operating that vehicle.* A simple premise yes, but proving it is quite another obstacle for the prosecutor and police officer.

With alcohol, our best evidence is simply presenting a blood alcohol concentration of 0.08% or greater to the judge or jury. If we can back that evidence with standardized field sobriety testing, and officer observations as to the driving ability of the defendant, that is gravy on an already tasty case, but really, not all that necessary. Successful prosecution of driving under the influence of drugs, or even, drugs in combination with alcohol, is much more challenging to both prosecutor and officer. First and foremost, even with a positive toxicology, the weight given that evidence is merely the presence of that drug. There is no magical threshold, such as the case with alcohol, where we can accurately equate the level of consumption with impairment. That onus falls on the shoulders of the police officer. Many times, the police officer can testify to driving indicators, if any, and field sobriety tests, if taken. But generally, the officer is incapable of connecting the dots between what he can observe and the effects of the drug indicated by a toxicology report. In other words, most testimony falls short of the cause and effect relationship between what was taken and what was observed. Next, compound that scenario with some of the newer drugs of choice, such as salvia divinorum, which is currently undetectable with the toxicology screen, or even more complicated, the presence of a drug for which the defendant has a legitimate prescription.

This is where the Drug Recognition Expert (DRE) can assist with the case. Through a systematic process, the DRE can provide testimony which first of all, corroborates the fact that there is in deed impairment, and secondly, that the impairment can be related to a category or categories of drugs. The DRE is trained to look for common signs and symptoms associated with various drug categories. By systematically documenting the signs attributed to the impairing substance, and by accurately recording the various symptoms commonly associated with the impairing substance, the DRE can present a clear and convincing picture of impairment. When, in the fortunate cases where a toxicology confirmation is available, the DRE testimony can show a cause and effect relationship between the drug ingested and the impairment observed. This is especially critical where the drug of impairment is a legal prescription, but where the user may be self-medicating or, more confounding, taking this legal prescription in combination with another prescription, or a low-dose of alcohol. This is very helpful to the prosecution when, neither dose is impairing, such as the person that takes only the prescribed amount of, for example, Xanax, and gives a positive breath sample of only 0.04%. Where neither is a dose that individually will normally cause impairment to a degree that renders the

defendant incapable of safely driving, when combined, can cause an additive effect to the point of impairment. These are the types of cases, even when a DRE has not been summoned at the time of arrest, can usually testify with some degree of success to educate the jury about the "mushrooming" or additive effects of drugs when taken in combination. The DRE can also associate any observations of the arresting officer to common symptomology of the combined drugs. While in most cases, the DRE will not be allowed to render an opinion as to that specific defendant's level of impairment, he can certainly corroborate the arresting officer's testimony of impairment by showing the relationship between what was taken and what was observed.

TRAINING

The training to become certified as a Drug Recognition Expert consists of four phases. The **first phase** consists of the application process. The DRE candidate must submit an application, which lists his qualification to become a DRE. The application asks for the number of DUI arrests made in the last two (2) years, as well as the number of DUI Drug arrests. It also asks the candidate to characterize what he/she feels the DRE program can bring to their agency and community, and how they can benefit from the training. Most importantly, the application requires a letter from the prosecuting attorney with jurisdiction over the DUI cases.

The **second phase** of the training consists of sixteen-hour preschool. This is a brief orientation to the DRE program. It gives DRE Instructors an opportunity to assess the candidate's fitness to be admitted to the main school, check the candidate's DUI detection and SFST skills, and see how well the candidate can grasp the basic DRE training information. It also allows the DRE Candidate to evaluate the program, and determine if it is something they wish to continue in. Upon successful completion of the pre-school, the candidate will be invited to participate in the Main School training.


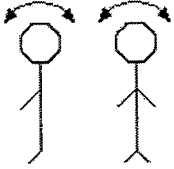
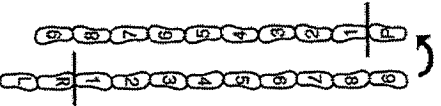
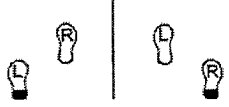
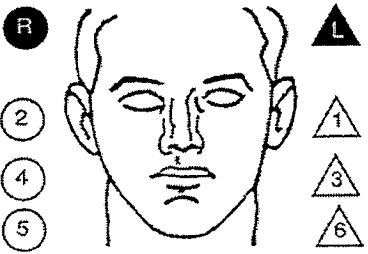
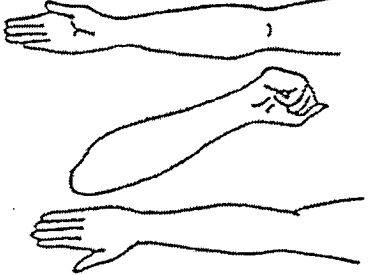
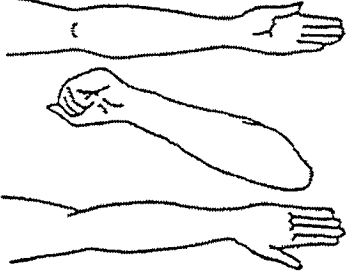
The DRE Main School is the **third phase** of the program. The main school is seven (7) days, comprising 56 hours of training. During this phase, the candidate DRE is thoroughly acquainted with the seven (7) drug categories of impairment, and trained to perform the twelve-step drug influence evaluation.

The **fourth phase** is called the certification phase, and consists of hands-on drug influence evaluations on actual impaired subjects. Each evaluation must be supervised by a certified DRE Instructor, and, both approved by the instructor and verified by toxicology. Also during this phase, the DRE Candidate is given a comprehensive final knowledge examination. Upon completion of this examination, a DRE Instructor interviews the Candidate. The instructor must then approve the Candidate for certification, along with another DRE Instructor that has worked with the Candidate during the certification phase. The final step in the certification process is; the State Drug Evaluation and Classification Program Coordinator must certify the Candidate and request certification credentials from the International Association of Chiefs of Police. The DRE Certification is valid for two (2) years. To be re-certified for an additional two (2) year period, the DRE must attend eight (8) hours of approved in-service training,

submit an updated curriculum vitae for review, be current on logging all DRE evaluations in to the tracking system, and have completed four (4) evidential field evaluations in the preceding two years. One evaluation must again be in front of a certified DRE instructor. Also, all face sheets from evaluations must be submitted for review by an instructor.

DRUG INFLUENCE EVALUATION

When a DRE is requested to evaluate an arrested suspect, the evaluation is performed with full observance of Miranda. The DRE will complete a Drug Influence Evaluation face sheet as well as a thorough narrative report of the results of the evaluation. The basis of the evaluation is to enable the DRE to render two (2) opinions based on the relevant evidence. First, that the suspect is impaired to a degree that renders him/her incapable of safely operating the vehicle. Secondly, that the impairment observed and documented is likely caused by a specific drug category, or a combination of drug categories. Also, the DRE's ability to articulate specific signs and symptoms of impairment from a drug will further justify the request for a blood test for a drug panel screen or a urine test to look for the presence of drug metabolites.

Evaluator		DRE No.	Rolling Log No.	Case Number	Evaluator's Agency
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Misc. No.	Arresting Officer's Agency
Arrestee's Name (Last, First MI)		DOB	Gender	Race	Arresting Officer (Name, ID No.)
Date Examined/Time/Location		Breath Results: <input type="checkbox"/> Refused Instrument #			Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input type="checkbox"/> Blood
Miranda Warning Given: <input type="checkbox"/> Yes <input type="checkbox"/> No By:		What have you eaten today?	When?	Have you been drinking? How much?	Time of last drink?
Time now?	When did you last sleep?	How long?	Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No		Attitude:		Coordination:	
		Breath:		Face:	
Speech:		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input type="checkbox"/> None <input type="checkbox"/> Left eye <input type="checkbox"/> Right eye	Tracking: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Corrective lens: <input type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)	Able to follow stimulus: <input type="checkbox"/> Yes <input type="checkbox"/> No	Eyelids: <input type="checkbox"/> Normal <input type="checkbox"/> Droopy	
Pulse and time 1. ___/___ 2. ___/___ 3. ___/___	HGN		Left eye	Right eye	Vertical Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No Convergence  Right eye Left eye
	Lack of smooth pursuit		None	None	
	Maximum deviation		None	None	
Romberg Balance 		Walk and turn test 		Cannot keep balance: _____ Starts too soon: _____ Stops Walking _____ Misses heel-toe _____ Steps off line _____ Raise arms _____ Actual # steps _____	
One Leg Stand 				L R <input type="checkbox"/> <input type="checkbox"/> Sways while balancing <input type="checkbox"/> <input type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input type="checkbox"/> <input type="checkbox"/> Puts foot down	
Internal clock estimated as 30 seconds		Describe Turn		Type of footwear:	
Nasal area:		Cannot do test (explain)		Oral cavity:	
Draw lines to spots touched 		Pupil Size	Room light	Darkness	Direct
		Left			
		Right			
		Hippus <input type="checkbox"/> Yes <input type="checkbox"/> No		Rebound dilation <input type="checkbox"/> Yes <input type="checkbox"/> No	
		RIGHT ARM 		LEFT ARM 	
Blood pressure ___/___		Temperature ___ °F		Reaction to light: Normal	
Muscle tone: <input type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:			
What medication or drug have you been using? How much?		Time of use?		Where were the drugs used? (Location)	
Member signature (Include rank)		ID #		Reviewed by:	
Opinion of evaluator:		<input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant	
		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen		<input type="checkbox"/> PCP <input type="checkbox"/> Narcotic Analgesic	
		<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis			

EVALUATING TRANSDERMAL ALCOHOL MEASURING DEVICES

Final Report

November 2007



DUI Commission 2009

11-4-09

Attachment 2

Executive Summary

The objective of this research was to evaluate the accuracy and precision of two types of electrochemical transdermal alcohol sensors.

Introduction

There is only a very sparse research literature directly relevant to electrochemical transdermal alcohol detection. This includes papers published between 1992 and 2003 by project consultant Robert Swift, M.D., Ph.D., and his colleagues at Brown University reporting on the WrisTAS™ device; and a 2006 paper by Joseph Sakai, M.D., and his colleagues at the University of Colorado, who evaluated the SCRAM™ device. In addition, a biophysical model of transdermal alcohol measurement was published in 2006 by Anderson and Hlastala, biophysicists from University of Washington. These papers plus a few additional abstracts from recent scientific meeting presentations constitute the published literature on transdermal alcohol devices. In addition to these directly relevant papers, this report also provides some context for transdermal alcohol estimation by summarizing some background literature related to other nontraditional means of estimating alcohol exposure such as alcohol biomarkers, sweat patches, and noninvasive approaches to estimating blood alcohol concentration (BAC) such as, near infrared spectroscopy.

With respect to transdermal alcohol, Swift (2003) reported that approximately 1 percent of consumed alcohol is lost through the skin as a vapor. The concentration of alcohol at the skin surface reflects the concentration of alcohol in the blood (BAC), but curves plotted to represent the change at the skin surface show a delay of 2 or more hours on the ascending side and often somewhat more on the descending side relative to BAC.

Methods

Two devices, the Alcohol Monitoring Systems (AMS) Secure Continuous Remote Alcohol Monitor (SCRAM™), and the Giner Inc Wrist Transdermal Alcohol Sensor (WrisTAS™) were used in combined laboratory and field trials for 96 total weeks of wear (an average of 4.3 weeks per subject) by 22 subjects (15 males, 7 females). The SCRAM™ device locks onto the ankle and is worn 24/7 for the full duration of the study, including showering, and cannot be removed by the subjects without activating an alert condition. The WrisTAS™ device is a research prototype that affixes with a Velcro strap to the wrist and must be removed for showering. Neither device can be fully immersed.

In the laboratory, subjects were dosed in the morning based on weight and sex to a BAC calculated to reach .08 grams per deciliter (g/dL); in 60 such dosing trials, the average BAC attained was .083 g/dL. In the subjects' own field-initiated drinking, the mean BAC attained was .077 g/dL during 211 trials when the minimal BAC was $\geq .02$ g/dL. The 271 episodes with BAC $\geq .02$ g/dL formed the "signal" for detection analyses. All subjects had to provide daily drinking and eating logs, and each was given a handheld portable breath-test device to use for the study duration that enabled them to record BACs when drinking on their own.

Transdermal alcohol detection evaluation proceeded in three ways: (1) coded judgments of response magnitude based on visual inspection of the device data, (2) alerts issued by the AMS Scramnetwork server denoting that an alcohol-positive event had occurred (SCRAM™ only), and (3) through use of an automated algorithm that smoothed spikes from the data and accommodated to shifting baselines. Alerts issued by the Scramnetwork showed a 93.5 percent concordance with the judged

coding of human investigators for true positives, and a 91.5 percent concordance with false-negative judgments. This strong agreement represents a kappa=.85 ($p=.000$). Although there was no comparable alert system for WrisTAS™, this degree of concordance between judged events and automated alerts for SCRAM™ serves to endorse the accuracy of the coded judgments against an external referent. The judged detection of alcohol by the transdermal devices relative to BAC forms the primary outcome data in this evaluation.

Results

The results demonstrated neither device has problems with false positives, but both had problems with false negatives and/or with unreadable data. The SCRAM™ false-negative rate due to complete response failure was 15 percent, and across all BACs, the SCRAM™ overall true-positive rate was 57 percent. The difference between the sum of those numbers and 100 percent represents some coding uncertainty explained in the report (another 22.5% was detected but as less than .02 g/dL BAC). Overall, the true-positive detection rate increased as the BAC increased from .02 to .08 g/dL. BAC episodes of .08 g/dL or greater that were attained during normal drinking were detected at a true-positive rate of .88 by SCRAM™. The WrisTAS™ sensor had a false-negative rate due to complete response failure of 8 percent (defined as on and working but not responding to ethanol), and an overall true-positive rate of 24 percent. The difference between the sum of those two numbers and 100 percent represent WrisTAS™ missing or erratic data; 67 percent of the positive BAC episodes were either missing or unreadable from the WrisTAS™ data. This aspect of WrisTAS™ is the largest concern, and it has been suggested by the manufacturer that the problem is a consequence of a faulty chipset that controls data I/O functions. The WrisTAS™ device tested, version 5, has now been replaced with version 6. We have no evaluation data on version 6.

The SCRAM™ system's sensitivity and accuracy declined over the duration of wear; an aggregate near-perfect accuracy and high rates of sensitivity during the first period of wear declined as a function of time in service. This finding emerged as the largest concern with SCRAM™. The most likely cause of this problem is a consequence of water accumulation inside the sensor housing: as water accumulates the sensor's ability to detect ethanol is reduced. The SCRAM™ device that was tested has now been replaced by a device with less dead airspace for holding water, and this has reportedly solved the problem of water accumulation. We have no evaluation data on this newer version of SCRAM™.

Results showed that laboratory studies in which the calculated dose of alcohol was consumed in a 30-minute period yielded lower transdermal responses than when subjects dosed themselves (in normal self-initiated drinking). This was more of a problem with SCRAM™, which samples every 30 to 60 minutes, than with WrisTAS™, which samples continuously. In self-paced normal drinking, (self-dosed) subjects' consumption ordinarily proceeded for several hours and this manner of intake provided for a more sustained BAC signal detectable by SCRAM™ than was possible with a brief spike following rapid dosing.

Transdermal signals of female subjects were generally measured as lower than those of males relative to the BAC attained. This was the case for both types of transdermal sensors. Anderson and Hlastala (2006) have shown that the thickness of the stratum corneum, the outermost layer of the epidermis, and the hydration state of the subject are factors in the movement of ethanol across dermal barriers to the skin surface. The proportional body water content differs between the sexes, and this may partially explain this finding.

Discussion

In evaluation of circumvention protection, the SCRAM™ system performed well. It may be possible for a highly motivated offender who is familiar with the SCRAM™ design to devise a procedure to temporarily block alcohol without blocking the infrared sensor that detects obstructions or the temperature sensor that monitors temperature near the skin surface. However, it seems unlikely that circumvention by obstruction can constitute a real threat to the integrity of this system while drinking because it would require constant vigilance by the offender. The communication protocols built into SCRAM™ that combine daily automated upload of data and the issuance of daily alerts to a program monitor will likely prevent most offenders from beating this system. The Scramnetwork server works well and proved to be a sophisticated and stable authorization and data-tracking system.

User comments allude to some discomfort, especially among females, and one female research subject showed evidence of bruising after a week of wear. Court-ordered users (including women) who were part of a focus group found SCRAM™ to be occasionally annoying but acceptable, and a tolerable alternative to jail time. Two commented that it helped goad them toward sobriety in a way that other motivators were unable to do. Vendors and others who manage SCRAM™ programs were generally positive about their experiences with it. Alcohol Monitoring Systems (AMS) staff commented that about 20 percent of the offenders seemed unable to control their drinking and had to be removed from the SCRAM™ program. However, we can provide no external corroboration of this estimate.

Overall, these devices performed more poorly than we expected with respect to sensitivity and accuracy; however, with independent evaluations, the manufacturers can improve their products. The attainable accuracy, however, may only be an approximation of BAC due to subject-specific factors that influence ethanol gas concentration at the skin surface. There is no doubt that the transdermal concept is valid as long as expectations of quantitative parity with BAC are moderated.

There is a parallel in these early findings about the accuracy of transdermal devices that is reminiscent of the early accuracy of alcohol ignition interlock devices. First generation interlock devices were often criticized for failing to match the performance characteristics of more conventional breath-test devices, despite interlocks having to operate in an often hostile automotive environment of heat, cold, dust, and vibration. Similarly, TAC is not BAC, and the expectation of parity is an impractical expectation to place on this nascent technology. Both interlocks and transdermal sensing need to be judged first on their potential contributions to public safety. Moreover, just as interlock devices have improved in the 20 years since their first adoption, it is reasonable to expect that the transdermal-sensing equipment will also improve. These devices warrant further development and further study.

AN ACT TO AMEND TITLE 11 OF THE DELAWARE CODE RELATING TO A PILOT PROGRAM FOR CONTINUOUS REMOTE ALCOHOL MONITORING.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF DELAWARE :

Section 1. Amend Chapter 42 of Title 11 of the Delaware Code by inserting a new section to read as follows:

"§4219. Continuous Remote Alcohol Monitoring Pilot Program.

(a) There is established a continuous remote alcohol monitoring pilot program to determine the potential for future expanded use of continuous remote alcohol monitoring technology for sentencing and probation purposes. The program shall be administered jointly by the Board of Parole and the Department of Corrections and shall last for a period of one year from the date the first person selected for continuous remote alcohol monitoring is issued the remote monitoring technology.

(b) Notwithstanding any provisions of this Code to the contrary, the program shall be administered in a four-part testing program as follows:

(1) Ten Level 5 inmates incarcerated for violations under §4177(a) of Title 21 of the Delaware Code for a third or fourth offense, or for alcohol related parole violations shall be chosen for participation in continuous remote alcohol monitoring by the Chairman of the Board of Parole and the Commissioner of the Department of Corrections, or their designees, upon recommendation of the sentencing judge. Selected inmates must agree and adhere to all conditions set by the Board of Parole and the Department of Corrections for participation in the pilot program. Those inmates shall be released on Level IV status, subject to the conditions of the pilot program and those of the sentencing judge. The remainder of a participant's sentence of incarceration shall be suspension upon the successful completion of the program requirements.

(2) Ten persons on probation with a condition of their probation of zero tolerance for alcohol shall be chosen for participation in continuous remote alcohol monitoring by the Chairman of the Board of Parole and the Commissioner of the Department of Corrections, or their designees. Selected probationers shall agree and adhere to all conditions set by the Board of Parole and the Department of Corrections or their designees.

(3) The Court of Common Pleas in and for New Castle County may impose, as part of the sentence of any person convicted under §4177(a) for a first offense where the first offender election is not available, or a second offense involving a blood alcohol content of .20 or higher, a period of continuous remote alcohol monitoring not to exceed 90 days for a first offense and 120 days for a second offense with zero tolerance for alcohol

use. There shall be 15 continuous remote alcohol monitoring units available for use in the Court of Common Pleas sentencing.

(4) The Family Court may impose, as a part of the conditions of the issuance of a contested protection from abuse order or the sentencing for a conviction on a domestic violence crime where alcohol was a significant factor, a period of continuous remote alcohol monitoring not to exceed 60 days for a domestic violence conviction and not to exceed 180 days on a protection from abuse order, where zero tolerance for alcohol is imposed. There shall be 15 continuous remote alcohol monitoring units available for Family Court sentencing.

(c) The Department of Corrections shall bear the costs of the 20 continuous remote alcohol monitoring units for use in the portions of the program described in subsections (b)(1) and (b)(2) of this section. The sentenced offender or person subject to a protection from abuse order shall bear the cost of monitoring under subsections (b)(3) and (b)(4) of this section, not to exceed \$15 per monitoring day. The Department of Corrections shall bear the costs of units reserved for use in subsections (b)(3) and (b)(4) of this section, but not actively monitoring an offender .

(d) For purposes of this pilot program, 'continuous remote alcohol monitoring' shall mean the ability to automatically, continuously test and periodically transmit alcohol consumption levels of, and tamper attempts by, the person being monitored."

Section 2. The Board of Parole will maintain statistical data on the pilot program and the Board of Parole and Department of Corrections shall submit a report to the Governor and the General Assembly on the effectiveness of continuous remote alcohol monitoring 6 months into the monitoring program. That report shall be updated after an additional 3 months with any recommendations for continuing, expanding, or limiting the use of remote alcohol monitoring technology.

Approved July 12, 2005