Drug-Impaired Driving: Trends, Technology, and Innovation

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TMCEC Traffic Safety Initiatives Conference
March 26, 2018
Overview
• Magnitude of the DUID problem
• DUID enforcement
• DUID testing methods
• Oral fluid testing at roadside
• Policy considerations
• Legal issues
• Advantages and barriers

MAGNITUDE OF THE PROBLEM
Limitations in crash data

- States vary considerably in how they collect DUID data:
  - How many drivers are tested?
  - What tests are used?
  - How are test results reported?
- The rate at which states test drivers involved in fatal crashes ranges from less than 10% to over 90%.
- FARS data merely reflects drug presence; it does not identify drug concentrations.

Percent of Fatally-Injured Drivers that Tested Positive for Drugs

<table>
<thead>
<tr>
<th>Year</th>
<th>Drug Presence</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>28%</td>
</tr>
<tr>
<td>2009</td>
<td>33%</td>
</tr>
<tr>
<td>2013</td>
<td>40%</td>
</tr>
</tbody>
</table>

Source: NHTSA/FARS 2013
Roadside data

- The most recent roadside survey data revealed an increase in drugged driving.
- Results from the NHTSA National Roadside Survey in 2013-2014 found that more than 22.5% of night-time drivers tested positive for illegal, prescription, or OTC medications.
  - Comparatively, only 1.5% of night-time drivers tested positive for a BAC above the legal limit of .08.
  - This is much higher than the 16.3% of weekend nighttime drivers who tested positive in 2007.

TxDOT: Drugs as a contributing crash factor

<table>
<thead>
<tr>
<th>Crash Contributing Factor</th>
<th>Rural Origin</th>
<th>Increasing Curve</th>
<th>Rural Intersection</th>
<th>Urban Origin</th>
<th>Increasing Curve</th>
<th>Urban Intersection</th>
<th>Total Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>TURNS IN PROPERLY - CUT CORNER ON LEFT</td>
<td>2</td>
<td>16</td>
<td>75</td>
<td>163</td>
<td>1,450</td>
<td>50</td>
<td>1,790</td>
</tr>
<tr>
<td>TURNS IN PROPERLY - WIDE RIGHT</td>
<td>6</td>
<td>25</td>
<td>197</td>
<td>351</td>
<td>2,067</td>
<td>123</td>
<td>2,690</td>
</tr>
<tr>
<td>TURNS IN PROPERLY - WRONG LANE</td>
<td>7</td>
<td>90</td>
<td>467</td>
<td>999</td>
<td>4,743</td>
<td>31</td>
<td>5,337</td>
</tr>
<tr>
<td>OTHER INFLUENCE - DRUGS</td>
<td>44</td>
<td>724</td>
<td>1,983</td>
<td>3,886</td>
<td>6,642</td>
<td>360</td>
<td>7,002</td>
</tr>
<tr>
<td>OTHER INFLUENCE - ALCOHOL</td>
<td>566</td>
<td>1,067</td>
<td>2,423</td>
<td>2,199</td>
<td>7,614</td>
<td>557</td>
<td>14,421</td>
</tr>
<tr>
<td>UNDER INFLUENCE - DRUG</td>
<td>200</td>
<td>310</td>
<td>584</td>
<td>632</td>
<td>1,432</td>
<td>87</td>
<td>2,562</td>
</tr>
</tbody>
</table>


The challenge of polysubstance use

Drug Combinations for Operators Positive for Marijuana*, 2015

*Toxicology results for all substances present in individuals who tested positive for marijuana

Traditional impaired driving enforcement

- DUI is the ONLY crime where the police stop investigating once they obtain a minimum amount of evidence according to standard operating procedure.
- Current protocols prevent drug testing once a suspect registers an illegal BAC limit (.08+).
- Implications of this practice:
  - Hinders the ability to measure the true magnitude of the drug-impaired driving problem is unknown.
  - Many DUI arrests are inaccurately attributed to alcohol alone.
Enforcement challenges

- Many officers are not trained to identify the signs and symptoms of drivers impaired by drugs.
- Delays in collecting a chemical sample may allow drugs to metabolize; the driver’s concentration levels may not reflect levels at the time of arrest.
  - Warrant requirements for blood draws.
- Drug testing is expensive and time-consuming (lab backlogs).

DUID detection training

- A variety of different detection strategies are available to law enforcement to identify drug-impaired drivers:
  - SFST academy and refresher training
  - Advanced Roadside Impaired Driving Enforcement (ARIDE) program
  - Drug Evaluation and Classification Program (DEC)

Drug Recognition Experts (DREs)

- The DEC program was established in 1980 by the LAPD.
- Officers are required to go through three phases of training totaling more than 100hrs before they are eligible to receive DRE field certification.
  - DRE Pre-School: 16hrs of classroom training
  - DRE School: 56hrs of classroom training
  - DRE Field Certification: approximately 80hrs
  - A total of 152 hours of training
- DREs must be recertified every two years (they must perform a minimum of four evaluations and attend eight hours of training in the process)
**Drug Recognition Experts (DREs)**

- DREs use a standardized 12-step protocol that allows them to determine whether a suspect:
  - is impaired;
  - if that impairment is caused by drugs or can be attributed to a medical condition; and,
  - the category of drug(s) that are the cause of the impairment (seven categories).
- Today, all 50 states, Canada, and the United Kingdom participate in the DEC program.
  - But not every jurisdiction in the country has an officer trained as a DRE; often an issue of resources.
- For more information, visit [www.decp.org](http://www.decp.org)

**ARIDE**

- ARIDE was created in an effort to increase education and training among patrol officers more broadly.
- Designed to bridge the gap between SFST and the DEC program in that it is an additional 16 hours of training but does not amount to the level of knowledge and training that DREs receive.
- The program trains officers to observe and identify signs of drug-related impairment.
- Can be delivered in-person or online (free of cost to interested agencies).
Texas: DRE Program

Certified DREs: 412
DRE instructors: 48
State Policy/HP DREs: 100
City Police Department DREs: 247
Sheriff’s Department DREs: 57
Other Agency DREs: 8
LE Agencies w/ Certified DREs: 105
Enforcement: 1,019
Training: 550
Total: 1,569


Texas: DRE Evaluations

Drug Category (DRE’s Opinion)
- Depressants: 546
- Stimulants: 284
- Hallucinogens: 4
- Dissociative Anesthetics: 70
- Narcotic Analgesics: 329
- Inhalants: 13
- Cannabis: 492

Poly Drug Use
- Total Number: 546
- Alcohol Rule Outs: 15
- Medical Impairment: 21
- No Opinion of Impairment: 205
- Toxicology Results: Pending: 134
- Toxicology - No Drugs: 36
- Toxicology Refused: 43

Officers need more tools

• Not all officers receive specialized training.
• Availability of DREs is limited.
• Polysubstance impaired driving is becoming increasingly common.
• Drugs metabolize quickly.
• Warrants take time.

Texas Strategic Highway Safety Plan 2017-2022

<table>
<thead>
<tr>
<th>Strategy #5 Increase data, training, and resources for prosecutors and officers in the area of drugged driving.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Countermasures and Programs:</td>
</tr>
<tr>
<td>Sa Develop training for prosecutors and regular patrol officers on detecting and prosecuting drugged drivers.</td>
</tr>
<tr>
<td>Sh Develop joint training for prosecutors and laboratory personnel (Forensic Toxicologist) to assist in presenting scientific evidence of drug impairment in court.</td>
</tr>
<tr>
<td>Sc Continue and increase Standardized Field Sobriety Testing (SFT), Advanced Roadside Impaired Driving Enforcement, and Drug Recognition Evaluator (DRE) training.</td>
</tr>
<tr>
<td>Sd Identify methodologies and resources for improving the identification of drugged driving as a contributing factor in impaired driving crashes.</td>
</tr>
<tr>
<td>Se Secure additional resources for laboratories.</td>
</tr>
<tr>
<td>Sp Continue to monitor the development of portable drug testing instruments and, as appropriate, investigate deploying them into the field as an additional tool to detect impaired driving.</td>
</tr>
<tr>
<td>Sh Encourage adoption of laws that streamline the processing of impaired drivers by law enforcement.</td>
</tr>
<tr>
<td>Sr Encourage adoption of laws that allow sobriety checkpoints.</td>
</tr>
</tbody>
</table>

Drug Testing Methods: Evidentiary
DUID testing

<table>
<thead>
<tr>
<th>Testing method</th>
<th>Location</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral fluid/saliva</td>
<td>Roadside (screening)</td>
<td>- Identifies presence of recent use</td>
<td>- Quality of kits varies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Easy to administer</td>
<td>- Not overly sensitive, especially for cannabis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Results in less than five minutes</td>
<td>- Not specific; generally test for drug classes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Short window of detection</td>
</tr>
<tr>
<td>Blood</td>
<td>Laboratory (evidentiary)</td>
<td>- Gold standard”</td>
<td>- Short window of detection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Conclusive, sensitive, and specific</td>
<td>- Expensive (e.g., $300 in CO)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Requires trained individual to conduct blood draw</td>
</tr>
<tr>
<td>Urine</td>
<td>Laboratory (evidentiary)</td>
<td>- Long window of detection</td>
<td>- Officers must observe suspects.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Expensive</td>
</tr>
<tr>
<td>Oral fluid/saliva</td>
<td>Laboratory (evidentiary)</td>
<td>- Conclusive, sensitive, and specific</td>
<td>- Short window of detection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Very expensive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Few qualified labs</td>
</tr>
</tbody>
</table>

Testing options: Urinalysis

- Traditionally, officers test suspected impaired drivers for drugs by collecting blood or urine samples and submitting them to a forensic laboratory.
- Both specimen collections are intrusive, require officers to handle biological samples, and are relatively expensive.
- Urine results do not correlate as well with impairment as blood and oral fluid testing do because its window of detection can extend for days, especially in the case of marijuana.
  - Only a gender-appropriate officer can collect a sample.
  - It can take hours to provide a specimen.

Testing options: Blood

- Blood is considered to be the “gold standard” in testing drivers for drugs as it reflects recent use and indicates drugs circulating in the body.
- Only medically trained professionals may collect blood samples.
- Problems with blood testing include the time between traffic stop and sample collection which can take 1.5-2 hours.
  - During this time, the drugs are dissipating from the driver’s body, so lower drug levels are measured in the laboratory test than were present at the time of the impaired driving incident.
- Prosecutors often have difficulty proving chain of custody, and laboratories with limited resources might not be able to provide a witness for trial.
Testing options: Oral fluid

- Oral fluid can be collected under the observation and supervision of an officer more quickly following a stop than urine or blood; it is a more reliable indicator of drugs present in the body at the time of the stop.
- Active drugs detected in saliva (e.g., THC or cocaine) are indicative of recent intake, not historical use.
- The cost for the laboratory analysis of oral fluid is essentially the same as the cost for blood analysis because similar instrumentation is used.
- Medical personnel are not necessary for the collection process, so the time and expense associated with blood collections are eliminated.

Oral fluid testing: Roadside

Oral fluid technology
How the technology works

- Oral fluid testing is based on lateral flow immunochromatographic technology, and results from these devices are considered to be presumptive.
- The tests detect the presence of classes of drugs rather than individual compounds. Does not provide quantification.
- Devices have handheld units and portable readers that print results with date/time.
- Require confirmatory lab testing using chromatographic and mass spectrometric methods to meet standards for admissibility.

Drug classes and cutoff levels

<table>
<thead>
<tr>
<th>Drug class</th>
<th>DOT 5000</th>
<th>DOT520</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannabinoids (THC)</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Amphetamines</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Methamphetamines</td>
<td>35</td>
<td>50</td>
</tr>
<tr>
<td>Cocaine</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Opiates</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Methadone</td>
<td>20</td>
<td>40*</td>
</tr>
</tbody>
</table>
Detection windows by drug class

<table>
<thead>
<tr>
<th>Drug</th>
<th>Detection Window</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cocaine</td>
<td>up to 24 hours</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>up to 24 hours</td>
</tr>
<tr>
<td>Cannabinoids (THC)</td>
<td>up to 24 hours</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>up to 24 hours</td>
</tr>
<tr>
<td>Opiates</td>
<td>up to 1-2 days</td>
</tr>
<tr>
<td>Morphine</td>
<td>up to 24 hours</td>
</tr>
<tr>
<td>Codeine</td>
<td>up to 1-2 days</td>
</tr>
<tr>
<td>Amphetamine</td>
<td>up to 1-2 days</td>
</tr>
</tbody>
</table>

Effectiveness of oral fluid

1. Sensitivity: proportion of drug-positive drivers that were correctly identified.
   - If sensitivity is low, many drug-positive drivers will not be detected.
2. Specificity: proportion of drug-negative drivers that were correctly identified.
   - If specificity is low, many drug-negative drivers will be arrested and required to provide a blood sample, only to have their charges dismissed.
3. Accuracy: overall proportion of tests that were correct, both positive and negative.

Effectiveness of oral fluid

- The technology used in these devices is similar to that used in toxicology labs. However, since the technology is not identical, the results are not identical either, and accuracy may vary depending upon the drug being tested.
- These devices are designed to avoid false positive readings, sometimes at the expense of missing true positives.
- Accuracy measurements are generally in the 90% range or higher for most drug classes and in the 80% range for THC. Tend to be lower for benzodiazepines.
Effectiveness of oral fluid

- In a formal evaluation, DRUID evaluated eight devices and found three with both sensitivity and specificity of more than 80% (Schulze et al., 2012).
- Beirness and Smith (2016) give a combined assessment of three common devices:
  - Sensitivity exceeded 0.80 for cannabis, cocaine, methamphetamine, and opioids. False positive rates for these drugs/drug categories were all between 3% and 7%.
  - Specificity exceeded 0.90 for all drugs/drug categories.
- These findings indicate that oral fluid screening could prove to be a valuable tool in the detection of driver drug use in Canada.

An assessment of oral fluid drug screening devices

Capturing polysubstance use

- In the Miami-Dade study (Logan et al., 2014), 39% of drivers who were found to have a BAC above .08 also tested positive for the presence of drugs.
- In the Dane County, WI study (Edwards et al., 2017), nearly 40% of the subjects with BACs exceeding .10 screened positive for one or more drug categories in both oral fluid and blood.
- These are individuals who likely would have only been prosecuted for drunk driving.

Why does this matter?
Legislative trends

- Recognizing the need to establish and adopt protocols to determine whether a driver is operating a vehicle while impaired by drugs and to establish and adopt protocols setting forth best practices to assist law enforcement agencies.
- Broadening of implied consent statutes to include more testing methods (e.g., oral fluid, saliva, other bodily substances).
- Implementing oral fluid pilot programs:
  - To test the viability of the technology
  - To obtain officer feedback
  - To collect data to inform decision-making
### States w/OF implied consent provisions

<table>
<thead>
<tr>
<th>Saliva</th>
<th>Oral fluid</th>
<th>Other bodily substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>Utah</td>
<td>Arizona</td>
</tr>
<tr>
<td>Colorado</td>
<td></td>
<td>Georgia</td>
</tr>
<tr>
<td>Michigan</td>
<td></td>
<td>Illinois</td>
</tr>
<tr>
<td>Missouri</td>
<td></td>
<td>Indiana</td>
</tr>
<tr>
<td>New York</td>
<td></td>
<td>Kansas</td>
</tr>
<tr>
<td>North Dakota</td>
<td></td>
<td>Louisiana</td>
</tr>
<tr>
<td>Oklahoma</td>
<td></td>
<td>Nevada</td>
</tr>
<tr>
<td>17 states</td>
<td></td>
<td>North Carolina</td>
</tr>
<tr>
<td></td>
<td></td>
<td>South Dakota</td>
</tr>
</tbody>
</table>

Source: Walsh (2009); NMS Labs (2014); NAMSDL (2016).

### Oral fluid pilots and programs

- Pilots have been conducted across the country:
  - California, Colorado, Florida, Kansas, Oklahoma, Vermont, Washington, Wisconsin, etc.
- Oral fluid is also being used internationally:

![Koalas](image)

### Legislatating oral fluid pilots

- Several states have introduced oral fluid pilot legislation including California, Maryland, and Michigan.
- Pilot bill passed in Michigan and became effective on Sept. 22, 2016 as Public Act 243:
  - Authorizes the Michigan State Police to establish a one-year pilot program in five counties for roadside drug testing.
  - Limits use of devices to DREs.
  - Authorizes an officer to make an arrest based on the results of a preliminary oral fluid analysis.
  - Establishes that a person who refuses to submit to the preliminary oral fluid test incurs a civil infraction.
Police in Michigan will begin testing drivers’ saliva for the presence of drugs during a pilot program in five counties that began in Nov.

Legislating oral fluid pilots

- Each of these pilots should require a report to the state legislature on outcomes (dependent on particular objectives).
- In Michigan, upon completion of the pilot a report must be made to the legislature within 90 days that:
  - Details the implementation of the program.
  - Provides data on the number and type of convictions that resulted from cases where oral fluid testing was utilized.
- The Society of Forensic Toxicologists offers pilot guidelines*
- To date, no state has transitioned from a pilot to a statewide program or has begun using oral fluid testing as part of standard operating procedure.

Oral fluid policy considerations

- Who gets tested (i.e., what will the testing protocol be)?
  - Drivers who register a low BAC or no BAC level only
  - Drivers with a BAC above .08
- When/where is testing done?
  - At roadside, at the station, both?
  - Prior to or post DRE evaluation (if available)?
- Who performs the test?
  - Any law enforcement officer with device training
  - DREs only
- Resources and training?
- Site selection
Is Canada ready to deal with stoned drivers?
As Canada prepares to legalize marijuana, it is totally unprepared to deal with the most dangerous side effect.

Recommendations from north of the border

Canadian oral fluid pilot
- Undertaken by Public Safety Canada, the RCMP, and the Canadian Council of Motor Transport Administrators (CCMTA).
- Pilot objectives:
  - Examine the use of oral fluid screening devices in the Canadian climate;
  - Develop and inform law enforcement training guidelines for use;
  - Inform standard operating procedures for device use; and,
  - Identify possible elements for inclusion as standards for the devices.
Recommendations

• Require mandatory SFST training for all officers utilizing the device.
• Standardize training and include hands-on experience with the device and instructional modules.
• Identify strategies to ensure officer safety when collecting an oral fluid sample (e.g., driver self-administers swab).
• Use a dual approach for the use of the printer: analysis printouts at both the roadside and at the police station.
• Develop device standards that require high reliability in extreme cold temperatures; capacity to analyze samples in 8 minutes or less; capacity to back-up/store analysis results; capacity to capture and/or report various types of data (e.g., officer name, location, date/time).

Legal issues

Fourth Amendment issues

• Missouri v. McNeely, 133 S.Ct. 1552 (2013)
  — Blood cannot be taken absent consent or a warrant unless an exception to the warrant requirement is met.
  — Followed McNeely, but held that breath can be taken without consent or a warrant.

<table>
<thead>
<tr>
<th>Summary of BIRCHFIELD v. NORTH DAKOTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warrant Required?</td>
</tr>
<tr>
<td>Breath</td>
</tr>
<tr>
<td>Blood</td>
</tr>
</tbody>
</table>
Implications of Birchfield

- At present, there is no breath test available to test for the presence of drugs – states rely on either blood or urine testing.
- Under the Birchfield decision, a subject cannot be forced to provide a blood sample in the absence of a warrant. Thus, a subject cannot be penalized for refusing to provide a blood sample voluntarily.
- Drugged drivers, therefore, will have an incentive to refuse chemical tests.
- It is also imperative to obtain a warrant quickly in DUID cases as drugs rapidly metabolize within the body.

Drug metabolism: Marijuana

- THC concentrations fall to about 60% of their peak within 15 minutes after smoking; 20% of their peak 30 minutes after smoking. However, impairment can last for 2-4 hours.
- With the warrant requirement, it may take up to 2 hours to obtain a warrant in certain jurisdictions. All the while, the THC is metabolizing within the body.
- The longer it takes to obtain the warrant, the lower the nanogram levels will be within the body; not reflective of levels at the time of driving.
- Particularly problematic in states that have per se limits.

![Graph showing THC, 11-OH-THC, THC-COOH concentrations over time.]
What about other testing methods?

- **State v. Thompson**, 886 N.W.2d 224 (Minn. 2016)
  - Urine cannot be obtained without consent or a warrant absent an exception to the warrant requirement.

  - Oral swabs for DNA can be taken without consent or a warrant during the booking process.
  - This method of sample collection is far less intrusive, dangerous, and painful than blood testing.
  - Establishes precedent that courts may treat oral fluid drug testing the same way as oral fluid DNA testing and breath testing.
  - Implications: samples may be obtained without a warrant and states could pass laws criminalizing oral fluid test refusals.

Admissibility: *Frye/Daubert*

- The **Frye standard** (*Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923)) is the traditional test for determining the admissibility of scientific evidence in court.

- The **Daubert standard** (*Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993)) is used in Federal court and the majority of states. However, the *Frye standard* is still applied in several states including CA, IL, MD, NJ, PA, and WA.

<table>
<thead>
<tr>
<th>Frye</th>
<th>Daubert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only applies to scientific evidence</td>
<td>Applies to all expert evidence (including non-scientific testimony and opinion testimony)</td>
</tr>
<tr>
<td>Application generally is limited to tests/methods, not “pure opinion” testimony like a doctor’s opinion</td>
<td>Applies to all opinions, not just tests and methods</td>
</tr>
<tr>
<td>Evidence is admissible if it is generally accepted in the relevant scientific communities</td>
<td>Evidence is admissible if it is reliable. Judges determine reliability based on a set of facts:</td>
</tr>
<tr>
<td>- Whether the method is generally accepted in the relevant scientific communities</td>
<td>- Whether the test/method is based upon a testable hypothesis and has been tested;</td>
</tr>
<tr>
<td>- The test has been subject to peer review and publication;</td>
<td>- Whether the test has been subject to peer review and publication;</td>
</tr>
<tr>
<td>- The research was conducted independent of a litigation;</td>
<td>- Whether there is a known error rate and, if so, if it is reasonable/acceptable;</td>
</tr>
<tr>
<td>- It is generally accepted in the relevant scientific communities.</td>
<td>- Whether it is generally accepted in the relevant scientific communities.</td>
</tr>
</tbody>
</table>
### Admissibility of Oral Fluid

- **Evidentiary tests**: While relatively new compared to traditional testing methods, laboratory testing of oral fluid specimens incorporates validated protocols similar to currently accepted practices for blood testing.
- The analyses are extremely reliable, and there is little doubt that the tests are admissible under Frye and Daubert.
- **On-site tests**: These devices are generally used as a screener to identify drivers from whom additional samples should be collected for laboratory testing purposes. In these cases, the results' admissibility is not a significant issue.
- In jurisdictions that wish to use the results for evidential purposes, agencies must carefully consider the scientific underpinnings of the devices they use and the evidence they can cite for their reliability.


### Admissibility of Oral Fluid: California

- Recently, a California court ruled that test results from the Dräger DrugTest 5000 were scientifically reliable and could be presented to the jury in a vehicular manslaughter case.
  - *The People of the State of California v. Junior Salas*, Kern County Superior Court; #BF153631A
- This is the first known ruling in the United States addressing the issue and therefore, is a landmark case for the admissibility of oral fluid drug test field results.
Admissibility of oral fluid: California

Find that this is sufficiently reliable evidence to be admitted in front of the jury and the jury -- well, the People will be allowed to present this evidence to the jury. The evidence of the drugs training -- drug screening test that was administered to the defendant on October 13th, 2013.

Advantages & Barriers

Admissibility of oral fluid

- Minimally invasive and easy to use.
- Results in under 10 minutes.
- Tests for the most common classes of drugs.
- Eliminates the need for a collection facility or same sex observation.
- Lower chance of sample becoming contaminated.
- Test performed close to the time of driving which allows for the detection of rapidly metabolized drugs.
- Short detection window = results are indicative of recent drug use.
- Strong correlation between drug profiles in blood and oral fluid.
- Enables law enforcement to identify more drugged drivers and those who drive impaired by a combination of drugs and alcohol.
- Prospect of countermeasures like ALS/ALR for drugs.
Concerns and barriers

• Lack of standards – NHTSA has yet to create standards for the devices or a conforming products list like they have for breath testing technology and interlocks.

• Not authorized for use in statute – many states do not currently have language in implied consent statutes that would allow for the collection of oral fluid.

• Lack of agency buy-in – some law enforcement agencies are resistant to change and many are fine relying on blood testing and, therefore, do not see the need for oral fluid testing.
  – Creating buy-in is essential so efforts are needed to educate officers, prosecutors, and decision-makers about the benefits of the technology and to address concerns that they may have.

Concerns and barriers

• False negatives – in some instances, a person may have a level of a drug in their system that is below the cutoff level. There is concern about letting impaired drivers go if officers rely solely on the findings of oral fluid devices when making decisions.
  – In the event that the officer does make an arrest, prosecutors are concerned that the case could be dismissed on account of the negative oral fluid result.
  – Officers should make decisions based on the totality of their observations and need to document signs and symptoms of impairment.
  – Of test should be used to confirm suspicions and if there are signs of impairment even if the result is negative, then a DRE should still be called.
  – The same argument has been made for the use of PBTs – officers need to rely on their training and not simply the test result to build a case.

Concerns and barriers

• Limited testing panel – concern that OF devices do not test for enough substances. It is not possible to develop a test battery that will capture everything. What the devices do is screen for the most common categories of drugs.

• Authorized users – debate among law enforcement about who should be permitted to use oral fluid testing. Some believe that it should be limited to DREs. Others argue that it should be officers who, at a minimum, completed ARIDE; some think that it should be any patrol officer who has SFST training.

• Officer safety – there must be protocols established that take officer safety into account (i.e., how will the sample be collected from the suspect – should it be collected by the officer or should the suspect be given instructions on how to provide the sample?)
Concerns and barriers

• **Admissibility in court** – there is some debate regarding whether OF results would withstand the Frye/Daubert standard.

• **No one has made the use of OF standard operating procedure** – while there have been many pilots launched across the country, law enforcement are not routinely using these devices. Someone has to be first! Agencies can look to other countries for guidance (e.g., Australia, UK, Canada).

• **Privacy/4th amendment issues** – groups like the ACLU have opposed the use of oral fluid testing as they view it as intrusive and as a way for the government to obtain DNA samples (even though it is not used for this purpose).

Oral fluid: Another tool

Oral fluid is not a silver bullet

• Oral fluid results in and of themselves cannot determine whether a driver is impaired.

• Therefore, the best use of oral fluid is as a corroborative test for drug ingestion in situations where a trained police has observed signs and symptoms of impairment. It is another investigative tool.

• Officers must first and foremost rely on observations and information obtained from SFSTs, ARIDE training, or DRE evaluations when making ultimate determinations about impairment. A positive oral fluid result can assist in confirming suspicions.
Next steps?
Standards/Model Specifications

Future testing methods
Intelligent fingerprinting
Cannabis breathalyzers

QUESTIONS?