

Drugged Driving Panel – TZD 2017

October 27, 2017 – St. Paul, MN

Your Panelists

- Donna Zittel, Forensic Scientist – BCA
- Sgt. Andrew Mahowald, Chisago County Sheriff's Office
- Lt. Don Marose – Minnesota State Patrol
- Joe Van Thomme, Prosecutor – Eckberg Lammers, P.C.



What We Will Cover

- The BCA's Role
- The Officer's Role
- The Prosecutor's Role
- Questions

3



DETERMINATION OF DRUG IMPAIRED DRIVING DEPENDS ON EVIDENCE OF DRUG USE THROUGH LABORATORY TESTING¹

1: National Highway Traffic Safety
Administration: Drug-Impaired
Driving: Understanding the Problem
and Ways to Reduce It: A Report to
Congress.



ST. PAUL BCA TOXICOLOGY LAB SECTION

- Alcohol section
 - Alcohol and volatile (“inhalant”) analysis
 - blood
 - urine
 - vitreous fluid
 - Liquid sample ethanol content (“open bottle samples”)
 - Provides expert court testimony
 - Confer with law enforcement & attorneys
 - Retrograde extrapolations
 - Discovery requests
 - Case specific circumstances



ST. PAUL BCA TOXICOLOGY LAB SECTION

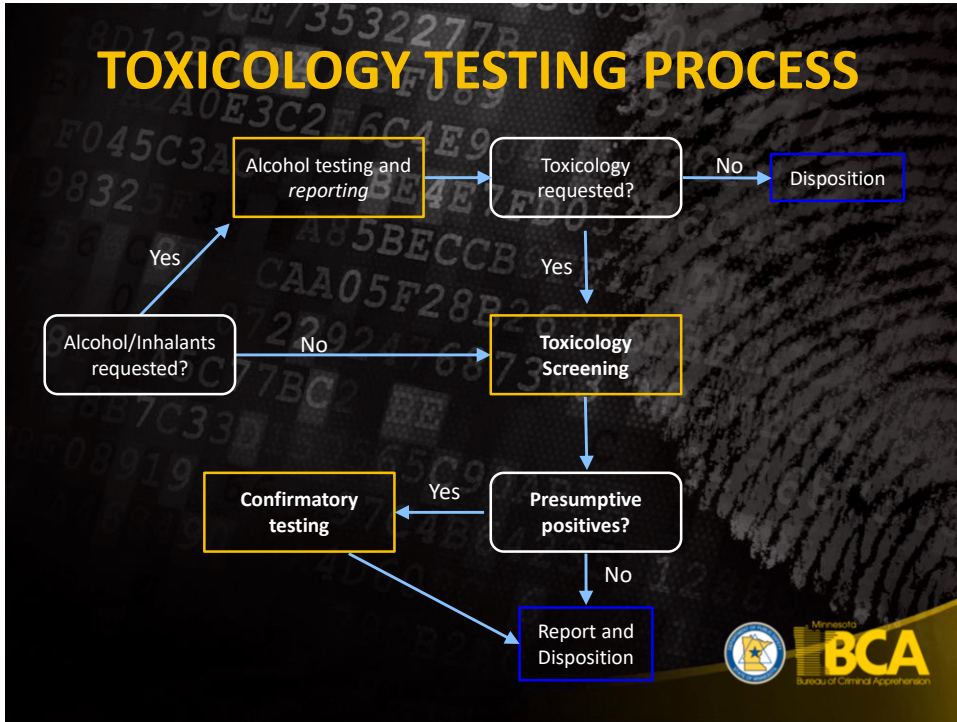
- Toxicology section
 - Screens and confirms the presence of scheduled and nonscheduled drugs in blood, urine, and vitreous fluid
 - Provides expert court testimony
 - Confers with law enforcement & attorneys
 - Pharmacodynamics
 - What the drug does to the body: general effects/ symptoms
 - Pharmacokinetics
 - What the body does to the drug: absorption/metabolism
 - Case specific circumstances
 - Discovery requests



WHAT ARE TESTING DECISION POINTS?



TOXICOLOGY TESTING PROCESS



ASSESSMENT FOR TOXICOLOGY ANALYSIS

- Alcohol testing results
 - Alc is $<0.08x$, and Tox testing is requested on kit sheet \rightarrow drug screening
 - Some drugs have a magnified effect when alcohol is present, i.e. benzodiazepines, cocaine, THC.
- DWI only cases, and alcohol is $>0.08x$, **generally** no drug screening.
 - Factors that may influence this: uncertainty range, time between incident and collection
 - PBT - $<0.08?$ May influence testing decisions
 - Case circumstances
 - Specifically requested

TOXICOLOGY ASSESSMENT

- If drugs are requested and case type = CVO, CVH, etc.
 - All testing will be completed
- Drugs requested with a PBT of .000 or valid breath test
 - No alcohol performed
 - Moves straight to tox testing
- If only alcohol is requested toxicology testing will not be initiated



WHAT ARE LABORATORY TESTING CAPABILITIES AND WHAT TYPE OF SAMPLE IS BEST?



BLOOD DRUG SCREENING: DRUG CLASSES

- Cannabinoids (THC)
- Cocaine
- Opiates
- Amphetamines
- PCP
- Barbiturates
- Benzodiazepines
- Methadone
- Zolpidem
- Carisoprodol



URINE DRUG SCREENING

- Urine drug screening by liquid chromatography tandem mass spectrometry
- **Urine= >80 drugs and/or metabolites**
- Mass spectral technique which will indicate the specific drug not just a class
 - High specificity
 - Confirmatory tests ordered for all positive analytes (except THCA)
- **Very sensitive**
 - Is more sensitive than the confirmatory assay for some analytes



EXPANDED TESTING REQUESTS

SEE BCA TOXICOLOGY WEBSITE FOR FULL TESTING CAPABILITIES

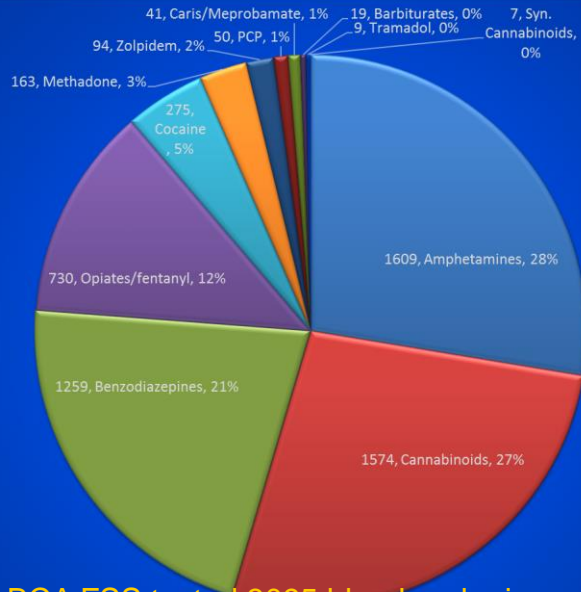
- Currently screened for in urine (available upon request in blood)
 - Bath Salts – Fentanyl(s) – Ketamine – Trazodone – Phenytoin
 - Methylphenidate – Diphenhydramine – Cyclobenzaprine
 - Tramadol – Buprenorphine
- Screened for in urine – (No blood test available)
 - Synthetic cannabinoids - limited menu
 - Psilocin
- Currently screened for in blood (available upon request in urine)
 - Barbiturates
- No screen - blood and urine test available upon request
 - GHB



WHAT DRUGS ARE WE SEEING IN THE SUBMITTED BLOOD AND URINE SAMPLES?

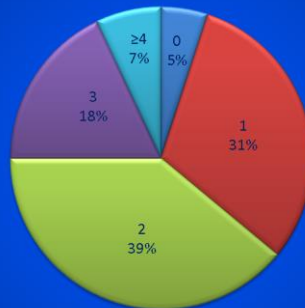


FREQUENCY OF DRUG CATEGORIES



2016 – BCA FSS tested 3095 blood and urine samples for impaired driving cases where drugs were suspected

NUMBER OF DRUG CATEGORIES INDICATED



64% of the samples were positive for more than one category

WHAT CAN SCIENTISTS SAY IN COURT REGARDING RESULTS AND HOW THEY RELATE TO DRUGGED DRIVING COURT CASES?



CONFER WITH THE FORENSIC SCIENTIST (WELL IN ADVANCE)

- The scientist who performed the confirmation of the drug will have had training on:
 - Pharmacodynamics
 - What the drug does to the body: general effects/symptoms
 - Pharmacokinetics
 - What the body does to the drug: absorption/metabolism
- Information or reference articles
 - General effects of the drugs
 - Which of the drugs can be metabolites of another drug
 - The metabolites that are psycho-active
 - General detection periods in blood and urine



ADDITIONAL HELP FROM YOUR FRIENDLY FORENSIC SCIENTIST

- Aid with drug schedules
 - MN Board of Pharmacy sets the schedules
- Review prescription lists
 - Correlate list to drugs found
- Assist with the Toxicology findings
 - Questions about the statement on report “No further toxicology testing will be performed”
- Discovery requests
- General therapeutic ranges



THERAPEUTIC RANGES

- Caution on utilizing therapeutic ranges:
 - Tolerance to their medication = amount measured may not necessarily be an abnormal or overdose amount
 - Regular tablets vs. extended release for drug
 - Amount prescribed and the dose relative to the time of the blood draw
 - Drugs break down at different rates in the body
 - Half life of drugs within body need to be considered
 - Impairment within the therapeutic range
 - Sleep aids for example
 - New or change in dose/medication



TOXICOLOGY COURT PREPARATION

- Contact the Scientist well in advance
 - Numerous subpoenas = availability??????
- Scientist may have general foundation questions
- Scientist will have Curriculum Vitae
- Scientist's training
 - Conferences and workshops
 - Drugs and their effect on human performance
 - Prior work experience
 - Certifications
- Understand the limitations of the testimony



The Patrol Officer's Role



Drugged Driving in the Field - Considerations

- “Drugged” impairment vs. traditional alcohol impairment
- Standard Field Sobriety Tests (SFSTs)
 - HGN – drugs that cause vs. drugs that don’t
- On-scene observations of impairment
- ARIDE – Drug Categories
- DRE Availability – answering questions or actual investigation



So You Think You Have Probable Cause...

- Step 1: Get a Warrant!
- Step 2: Seek a blood sample if possible
 - Especially in cases where quantity measurement is sought/needed
- Step 3: If you’re not a DRE and none available, document all indicia of impairment observed on scene
 - These can change quickly and drastically depending on impairing agent
- Step 4: Translate “cop-talk” into human language for judge, jury, prosecutor (ahem)
 - Example: “Impairing Agent” = “Drugs”



Drugged Driving – Common Questions

- What will non-alcohol impairment look like in a DWI investigation?
 - Wide Range!
- What happens when the driver is impaired by alcohol + drugs?
 - (Prosecutor's Note: they're screwed.)
- What Do I Do When...
 - The driver is on *something* but I don't know what...
 - I can't find a DRE...
 - I can't get a hold of a judge for a warrant (see: prosecutor's slides!)
- Are there specific officer safety concerns for drug-impaired drivers?



The Prosecutor's Role

*The following are questions received
by your prosecutor from actual law enforcement officers.*

Names have been changed to protect the innocent.



“Drugged Driving Changes Everything...right?”

Wrong!

Preventing drugged driving requires what all crime prevention requires:

- Good investigations
- Good documentation
- Good witnesses



“Right. So what does that mean?”

GOOD INVESTIGATIONS

Understanding how to get the best evidence:

- Warrants vs. “ask for consent”
- The importance of admissions
- D.R.E.s
- Understanding what to look for



“Right. So what does that mean?”

GOOD DOCUMENTATION

Understanding what your prosecutor needs from you:

- Well
- Written
- Reports.



“So what should my report look like?”

Cheat Sheet!

1. Date/time/location
2. Who you are
3. Basis for the stop/contact
4. Who they are + how you identified them
5. Initial observations (e.g. odor of alcohol or not, eyes, speech etc)
6. Investigation (e.g. SFSTs, video review etc)
7. PC for arrest
8. Searches, admissions, test results (for DWIs)



“How do I make a good witness?”

Be a P.E.T.!

Prepare

Engage

Teach



“How do I make a good witness?”

PREPARE

- Review your reports. Every time.
- Know why you're being called!
- Be punctual.

ENGAGE

- Be credible.
- Be professional.
- Be impartial.

TEACH

- Educate the jury.
- Talk Good.
- Be confident.

“What if I can’t get a hold of a judge for a warrant?”

Considerations:

- Where are you executing your search?
 - *County of offense vs. county of search vs. judicial district*
- Do you have time to keep trying?
 - *If so...keep trying.*
- Are there other options available?
 - *Consent? Can you document that it is freely given?*
- What is the local practice?
 - *Some counties may have a local practice for this*
- Have you documented this?
 - *When you can't find a judge, it's important to trouble-shoot why.*

“I regularly read Court of Appeals opinions cases. What is this ‘dust-off’ case all about?”

State v. Chantel Lynn Carson

- Defendant found “slumped” over in vehicle multiple times in short period of time
- Each time, cans of “Dust-Off” inhalant cans found in car, other indicia of impairment observed
- Dust-Off contains 1,1 – difluoroethane or DFE
- Chemical tests confirm
- Hazardous Substance DWI?
- No! Because DFE is not a defined “hazardous substance” under MN laws, by definition, defendant could not be guilty of DWI.
- Semantics?



“How do I keep up with all the types of impairing substances?”

- Get involved!
- Document what you observe!
- Follow up with partners! (prosecutors, BCA, other agencies)
- Know your role.



QUESTIONS?



CONTACT INFORMATION

Donna Zittel, Forensic Scientist – BCA
donna.zittel@state.mn.us

Lt. Don Marose, Minnesota State Patrol
don.marose@state.mn.us

Sgt. Andy Mahowald, Chisago County Sheriff's Department
andrew.mahowald@chisagocounty.us

Joe Van Thomme, Prosecutor – Eckberg Lammers, P.C.
jvanthomme@eckberglammers.com